

**REGULATORY AMENDMENT TO THE  
FISHERY MANAGEMENT PLAN FOR THE  
SUMMER FLOUNDER AND SCUP FISHERY**

**September 1996**

**Mid-Atlantic Fishery Management Council  
in cooperation with the  
Atlantic States Marine Fisheries Commission,  
the  
National Marine Fisheries Service,  
the  
New England Fishery Management Council,  
and the  
South Atlantic Fishery Management Council**

**Draft adopted by MAFMC: 8 August 1996  
Final adopted by MAFMC: 18 September 1996  
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**25 September 1996**



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## 2. SUMMARY

This Regulatory Amendment to the Fishery Management Plan for the Summer Flounder and Scup Fishery Management Plan (FMP), prepared by the Mid-Atlantic Fishery Management Council (Council), is intended to manage the scup (*Stenotomus chrysops*) fishery pursuant to the Magnuson Fishery Conservation and Management Act of 1976, as amended (MFCMA). The management unit remains unchanged and is scup in US waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border. The objectives of the FMP remain unchanged and are:

1. Reduce fishing mortality in the scup fishery to assure that overfishing does not occur.
2. Reduce fishing mortality on immature scup to increase spawning stock biomass.
3. Improve the yield from the fisheries.
4. Promote compatible management regulations between State and Federal jurisdictions.
5. Promote uniform and effective enforcement of regulations.
6. Minimize regulations to achieve the management objectives stated above.

Amendment 8, which was approved by NMFS on July 29, 1996, contains regulations that will implement a coastwide commercial quota beginning 1 January 1997. The quota will be calculated to achieve the target exploitation rate established for that year and will be allocated on a coastwide basis. During the development of Amendment 8, the Council and Commission began the process of defining the system that would be used to allocate the quota. In order to begin the rebuilding of the resource, they decided to submit the amendment before the coastwide quota system was refined so that other regulations, such as minimum size and mesh, could be implemented as quickly as possible. The Council and Commission planned to develop another system during the first year of the amendment to allow for an equitable distribution of the quota to commercial fishermen. The current regulations in Amendment 8 implement a coastwide, commercial quota that will allow the commercial fishery to operate without trip limits or seasonal allocations. As such, it is possible that large vessels fishing in the first portion of the year will fill the annual quota quickly, closing the fishery before other participants have an opportunity to fish on the stock.

This regulatory amendment would revise the commercial quota system for scup. Specifically, the annual commercial TAC (total allowable catch) would be allocated into three periods: January-April (45.11%), May-October (38.95%), and November-December (15.94%). Discards would be estimated for each period and subtracted from the TACs to derive the quotas for each period. A coastwide quota and landing limit system would be used during the winter periods (January-April and November-December). During the summer period (May-October) a state-by-state quota system would be in effect. The commercial fishery would close once the allocation for a given period was reached. Any overages during the winter periods would be subtracted from the period's allocation for the following year. Any quota overages by a state during the summer period would be deducted from the state's share the following year.

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## **4. INTRODUCTION**

### **4.1. DEVELOPMENT OF THE PLAN**

The Council began the development of a fishery management plan (FMP) for scup in 1978. Although preliminary work was done to support the development of an FMP, a plan was not completed.

In January 1990, the Council and the Atlantic States Marine Fisheries Commission (Commission) began the development of a fishery management plan for scup as an amendment to the Summer Flounder FMP. However, the development of a scup plan was delayed through a series of amendments to the Summer Flounder FMP and work on a separate Scup FMP was not resumed until 1993.

The Council and the Commission adopted the Scup FMP for Secretarial approval in November, 1995. Subsequently, the National Marine Fisheries Service (NMFS) requested that the scup regulations be incorporated into another FMP to reduce the number of separate fisheries regulations issued by the federal government. As a result, the Scup FMP was incorporated into the summer flounder regulations as Amendment 8 to the Summer Flounder FMP. Amendment 8 was approved by the NMFS on July 29, 1996.

Amendment 8 contains regulations that will implement a coastwide commercial quota beginning 1 January 1997. The amendment stipulates that during the first year of implementation, another system to distribute and manage the commercial quota will be developed by the Council and Commission. This regulatory amendment specifies that system.

### **4.2. PROBLEM FOR RESOLUTION**

Amendment 8 proposed regulations that would establish a commercial quota beginning 1 January 1997. The quota would be calculated to achieve the target exploitation rate established for that year and would be allocated on a coastwide basis. During the development of Amendment 8, the Council and Commission began the process of defining the system that would be used to allocate the quota. In order to begin the rebuilding of the resource, they decided to submit the amendment before the coastwide quota system was refined so that other regulations, such as minimum size and mesh, could be implemented as quickly as possible. The Council and Commission planned to develop another system during the first year of the amendment to allow for an equitable distribution of the quota to commercial fishermen. The current regulations in Amendment 8 implement a coastwide, commercial quota that will allow the commercial fishery to operate without seasonal allocations or trip limits.

A coastwide quota fails to recognize the seasonal fishing patterns in the commercial scup fishery, i.e., larger vessels operating offshore in the winter and smaller vessels and fixed gear operating inshore during the summer months. The current quota system could allow for a situation in which larger vessels fishing in the first portion of the year filled the annual quota quickly. Unrestricted fishing while the quota was available would increase the possibility of negative effects including irregular supplies, market gluts, and exvessel price fluctuations associated with derby-style fishing practices. In addition, the possibility that the quota would be filled in the first portion of the year could disadvantage select groups of other fishermen. Specifically, smaller vessels and fishermen using fixed gear during the summer months may not have any quota available to them for the year.

### **4.3. MANAGEMENT OBJECTIVES**

The objectives of the FMP are to:

1. Reduce fishing mortality in the scup fishery to assure that overfishing does not occur.
2. Reduce fishing mortality on immature scup to increase spawning stock biomass.
3. Improve the yield from the fisheries.

4. Promote compatible management regulations between State and Federal jurisdictions.
5. Promote uniform and effective enforcement of regulations.
6. Minimize regulations to achieve the management objectives stated above.

#### **4.4. MANAGEMENT UNIT**

The management unit is scup (*Stenotomus chrysops*) in US waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

#### **4.5. MANAGEMENT STRATEGY**

Overfishing for scup is defined as fishing in excess of the  $F_{max}$  level.  $F_{max}$  is a biological reference point that corresponds to the level of fishing mortality (F) that produces the maximum yield per recruit. Based on current conditions in the fishery,  $F_{max}$  is 0.24.

The Council and the ASMFC Management Board approved a recovery strategy that reduces overfishing on scup over a 7 year time frame. The recovery strategy calls for minimum fish sizes and commercial gear regulations in year 1. These regulations would reduce mortality on small scup, i.e., those scup less than 9" TL. Beginning in year 2, additional regulations would be implemented to reduce mortality on larger fish. These regulations will include a commercial quota and a recreational harvest limit. In years 2 through 4, target exploitation rates would be 47% for scup. In years 5 and 6, the target exploitation rates would be 33% and in year 7 and subsequent years, the target exploitation rate would be based on  $F_{max}$ . Currently, the exploitation rate associated with  $F_{max}$  is 19%.

### **5. DESCRIPTION OF THE STOCK**

#### **5.1. SPECIES DISTRIBUTION**

There is no need to change this section at this time.

#### **5.2. ABUNDANCE AND PRESENT CONDITION**

There is no need to change this section at this time.

#### **5.3. STOCK CHARACTERISTICS AND ECOLOGICAL RELATIONSHIPS**

There is no need to change this section at this time.

#### **5.4. MAXIMUM SUSTAINABLE YIELD**

There is no need to change this section at this time.

#### **5.5. PROBABLE FUTURE CONDITION**

There is no need to change this section at this time.

### **6. DESCRIPTION OF HABITAT**

#### **6.1. DISTRIBUTION OF THE SPECIES, HABITAT REQUIREMENTS, AND HABITAT OF SCUP**

There is no need to change this section at this time.



## **6.2. HABITAT CONDITION**

There is no need to change this section at this time.

## **6.3. GENERAL CAUSES OF POLLUTION AND HABITAT DEGRADATION**

There is no need to change this section at this time.

## **6.4. PROGRAMS TO PROTECT, RESTORE, PRESERVE, AND ENHANCE THE HABITAT OF THE STOCKS FROM DESTRUCTION AND DEGRADATION**

There is no need to change this section at this time.

## **6.5. HABITAT PRESERVATION, PROTECTION AND RESTORATION RECOMMENDATIONS**

There is no need to change this section at this time.

## **6.6. HABITAT RESEARCH NEEDS**

There is no need to change this section at this time.

# **7. DESCRIPTION OF FISHING ACTIVITIES**

## **7.1. DOMESTIC COMMERCIAL FISHERY**

There is no need to change this section at this time.

## **7.2. DOMESTIC RECREATIONAL FISHERY**

There is no need to change this section at this time.

## **7.3. FOREIGN FISHING ACTIVITIES**

There is no need to change this section at this time.

# **8. ECONOMIC CHARACTERISTICS OF THE FISHERY**

## **8.1. COMMERCIAL FISHERY**

There is no need to change this section at this time.

## **8.2. RECREATIONAL FISHERY**

There is no need to change this section at this time.

## **8.3. INTERNATIONAL TRADE**

There is no need to change this section at this time.

# **9. FISHERY MANAGEMENT PROGRAM**

## **9.1. MEASURES TO ATTAIN MANAGEMENT OBJECTIVES**

### 9.1.1. Specification of OY, DAH, DAP, JVP, TALFF, Overfishing Definition, and Fishing Mortality Rate Reduction Strategy

Section 303(a)(3) of the MFCMA requires that FMPs assess and specify the OY from the fishery and include a summary of the information utilized in making such specification. OY is to be based on MSY, or on MSY as it may be adjusted for social, economic, or ecological reasons. The most important limitation on the specification of OY is that the choice of OY and the conservation and management measures proposed to achieve it must prevent overfishing.

OY is all scup harvested pursuant to this FMP. OY cannot be specified as a quantity because it will change as the fishing mortality rate target varies and is dependent on the level of recruitment.

The Council has concluded that US vessels have the capacity to, and will, harvest the OY on an annual basis, so DAH equals OY. The Council has also concluded that US fish processors, on an annual basis, will process that portion of the OY that will be harvested by US commercial fishing vessels, so DAP equals DAH and JVP equals zero. Since US fishing vessels have the capacity and intent to harvest the entire OY, there is no portion of the OY that can be made available for foreign fishing, so TALFF also equals zero.

Overfishing for scup is defined as fishing in excess of the  $F_{max}$  level.  $F_{max}$  is a biological reference point that corresponds to the level of fishing mortality (F) that produces the maximum yield per recruit. Based on current conditions in the fishery,  $F_{max}$  is 0.24.

Stock assessment information indicates that scup are overfished. Age based analyses indicate that current fishing mortality rates (F) are at least 1.3.

The Council and the ASMFC Management Board approved a recovery strategy that reduces overfishing on scup over a 7 year time frame. The recovery strategy calls for minimum fish sizes and commercial gear regulations in year 1. In years 2 through 4, target exploitation rates would be 47% for scup. In years 5 and 6, the target exploitation rates would be 33% and in year 7 and subsequent years, the target exploitation rate would be based on  $F_{max}$ . Based on current conditions in the fishery,  $F_{max}$  is 0.24 and the associated exploitation rate is 19%. This recovery schedule is:

#### Exploitation Rates

Current	69%
Year 2	47%
Year 5	33%
Year 7	19%

9.1.2. Specification of Adopted Management Measures (This section is unchanged from Amendment 8 except 9.1.2.3.7 as noted below.)

#### 9.1.2.3.7. Commercial quota

Beginning in year 2, a quota would be allocated to the commercial fishery to reduce exploitation rates on the fully recruited age groups (i.e., fish larger than 9" TL). The commercial quota will be derived from a total allowable catch (TAC). The TAC will be calculated each year based on the target exploitation rate and the projected stock size estimates derived from annual stock assessment information.

The TAC will be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch (landings plus discards) for the years 1988-1992. Based on this data, 78% of the TAC would be allocated to the commercial fishery.

The TAC would then be allocated into three periods based on commercial landings data for 1983-1992 (Fig 1). The allocations periods and the associated percent of the total quota would be: January-April (45.11%), May-October (38.95%), and November-December (15.94%) (Table 1). An estimate of

commercial discards for each period would then be subtracted from the TAC to derive the quota (allowable harvest) for each period.

In the two winter periods, January-April and November-December, a coastwide quota system would be implemented in conjunction with a system of landing limits. Landing limits would remain in effect until the fishery was closed by NMFS. Landing limits would be implemented by the states and the NMFS and could change over the period. However, landing limit systems would be proposed prior to the quota year through the Monitoring Committee process and could not change during the quota year. The states would be responsible for notification of state and federal permit holders of initial period landing limits, in period landing limit adjustments, and closures. The fishery would be required to close before the end of the period based on projections by NMFS that the quota would be taken. Vessels with moratorium permits could only land scup caught in the EEZ in coastal states from Maine to North Carolina.

Any landings in excess of the quota that occurred during the winter periods (January-April or November-December) would be subtracted from the following year's quota for that period. For example, if the quota was exceeded by 30,000 pounds in the January-April period in 1998, 30,000 pounds would be subtracted from the quota for that period in 1999.

During the first year of quota management (1997), it is certain that a coastwide quota will be implemented before the regulations specified in this amendment take effect. As such, any overages from the first period in 1997 will be deducted from the quota allocation for the November-December 1997 period. Any landings in excess of both winter periods would be deducted from the winter periods for 1998.

The coastal states would work with the NMFS to administer the quotas, coordinate coastwide closures, enforce state and federal regulations, and collect data. The quota during the winter periods would apply throughout the management unit, that is, in both state and federal waters. All commercial landings would count toward the quota. When the quota had been landed, fishing for and/or landing scup would be prohibited. The Regional Administrator shall close the EEZ to fishing for scup by commercial vessels with a moratorium permit when the quota has been landed. States would have the responsibility for closures in their state.

During the summer months, a state-by-state system would be in effect. In a state-by-state system, quotas would be distributed to the states based on their percentage share of commercial landings for the period May to October, 1983-1992. These state specific shares are specified in Table 2. The state shares during the summer period could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1983-1992. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

States would have the responsibility for closures in their state and the Regional Administrator would be required to prohibit landings by federally permitted vessels in any state that had reached its quota. States would be allowed to transfer or combine quotas upon approval by the Regional Administrator and publication in the Federal Register. The states could impose trip limits or other measures to manage their quotas. The system would be the same as that operating under the Summer Flounder FMP for summer flounder.

During the second period, when the state-by-state system is in effect, all scup landed for sale in a state would be applied against the state's annual commercial quota regardless of where the scup were harvested. Any overages of the commercial quota landed in a state would be deducted from that state's annual quota for the following year. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

A state would be granted de minimus status if the commercial scup landings for the last preceding calendar year for which data are available for the summer period were less than 0.1% of the summer period's quota. De minimus status would allow for minimal allocations equal to 0.1% of the quota for the summer period to these states. The total amount of quota allocated to these de minimus states would be subtracted from the summer quota before the remainder was allocated to the other states.

Using data collected through this Amendment (section 9.1.3), NMFS will monitor the fishery to determine when a quota will be reached. It is intended that the states will assist NMFS with data collection.

The annual commercial quota will be set at a range of between 0 and the commercial share of the maximum allowed by the adopted fishing mortality rate reduction strategy. All landings by any vessel that has a commercial moratorium permit (permit to sell) counts against the quota, whether the scup are caught with an otter trawl, a scallop dredge, hook and line, or any other gear. If the vessel does not have a commercial moratorium permit, fish caught in the EEZ may not be sold and the recreational rules on size, possession, and season apply.

Vessels without moratorium permits and fishing exclusively in state waters could catch and sell scup. All landings by these vessels would also count against the quota. The states would require that all persons who land scup from state waters and do not qualify for federal permits to have a state permit and report all landings. The states would provide this data to NMFS. If the state was closed to landings, landings of scup by all vessels would be prohibited.

The annual commercial quota and landing limits would be based on the recommendations of the Scup FMP Monitoring Committee to the Council and ASMFC Board. The Council and Commission would consider those recommendations and submit their recommendations to the Regional Administrator.

**9.1.3. Specification and Sources of Pertinent Fishery Data** (This section is unchanged from the current FMP.)

## **9.2. ANALYSIS OF BENEFICIAL AND ADVERSE IMPACTS OF ADOPTED MANAGEMENT MEASURES**

### **9.2.1. The FMP Relative to the National Standards.**

Section 301(a) of the MFCMA states: "Any fishery management plan prepared, and any regulation promulgated to implement such plan pursuant to this title shall be consistent with the following national standards for fishery conservation and management." The following is a discussion of the standards and how this FMP meets them:

**9.2.1.1. Conservation and management measures shall prevent overfishing while achieving, on a continuous basis, the optimum yield from each fishery.**

MSY (section 5.4) has not been specified for scup. OY is all scup harvested pursuant to this FMP.

Overfishing in the Scup FMP is defined as fishing in excess of the  $F_{max}$  level.  $F_{max}$  is a biological reference point that corresponds to the level of fishing mortality (F) that produces the maximum yield per recruit. The Council has adopted an overfishing definition for scup based on an estimate of  $F_{max}$ . Best available information indicates that  $F_{max}$  is 0.24 for scup based on current conditions in the fishery.

Mortality rates on scup have increased substantially in recent years. Based on a review of coastwide data, mortality rates in the early 1980's were slightly greater than 0.3, the value derived by Mayo (1982) for scup caught in the late 1970's. Howell (1990) estimated that F increased from 0.4 in the early 1980's to over 1.0 in 1988 based on catch curve and length based analysis of scup taken in Connecticut and Massachusetts surveys. Current estimates of F are 1.3 or higher. This information would indicate that scup have been overexploited (F's in excess of  $F_{max}$ ) since the early 1980's. Assuming a current fishing mortality rate of 1.3 for scup, exploitation rates would have to be reduced 72% to achieve an  $F_{max}$  of 0.24.

The Council has adopted a strategy that will reduce mortality to the  $F_{max}$  level by the seventh year following FMP implementation. The following recovery strategy will be implemented. In year 1, minimum fish sizes and commercial gear regulations will be imposed. In year 2 to 4, target exploitation rates will be 47% for scup. In years 5 and 6, the target exploitation rates will be 33% and in year 7 and subsequent years, the target exploitation rate will be the one associated with  $F_{max}$  which is currently an F of 0.24 or an exploitation rate of 19%.

This seven-year strategy reflects the pressure now being placed on fishermen by other FMPs. Although the scup resource should be rebuilt as quickly as possible, scup management measures can be implemented over an seven-year time frame to minimize the short term economic burden placed on fishermen and still reduce the overfished condition of the stocks.

**9.2.1.2. Conservation and management measures shall be based upon the best scientific information available.**

This amendment is based on the best and most recent scientific information available. Future scup research should be devoted toward both data collection and analysis in order to evaluate the effectiveness of this amendment. This species should be reviewed annually by the NEFSC Stock Assessment Workshop process.

**9.2.1.3. To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.**

The Amendment's management unit is scup throughout their range on the Atlantic coast from Maine through Cape Hatteras, North Carolina, including the EEZ, territorial sea, and internal waters. This specification is considered to be consistent with National Standard 3.

**9.2.1.4. Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.**

The Amendment does not discriminate among residents of different states. It does not differentiate among US citizens, nationals, resident aliens, or corporations on the basis of their state of residence. It does not incorporate or rely on a state statute or regulation that discriminates against residents of another state. Commercial and recreational regulations would be applied coastwide.

This amendment would modify the commercial fishery quota system proposed in Amendment 8. This revised system, based on traditional landings patterns, would ensure that all fishermen receive a fair and equitable share of the resource.

This amendment does not modify the other regulations proposed in Amendment 8.

**9.2.1.5. Conservation and management measures shall, where practicable, promote efficiency in the utilization of the fishery resources; except that no such measure shall have economic allocation as its sole purpose.**

The management regime is intended to allow the fishery to operate at the lowest possible cost (e.g., fishing effort, administration, and enforcement) given the FMP's objectives. The objectives focus on the issue of administrative and enforcement costs by encouraging compatibility between federal and state regulations since a substantial portion of the fishery occurs in state waters. The FMP places no restrictions on processing, or marketing and no unnecessary restrictions on the use of efficient techniques of harvesting.

**9.2.1.6. Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.**

The management regime was developed to be compatible with and reinforce the management efforts of the states and the Commission. The commercial quota system was developed with the recognition that the commercial fishery for scup operates differently over the year. This revised system, based on traditional landings patterns, would ensure that all fishermen receive a fair and equitable share of the resource.

**9.2.1.7. Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.**

The management regime was developed to be compatible with and reinforce the management efforts of the states and the Commission. The provisions of this FMP have been adopted by the Commission.

**9.2.2. Cost/Benefit Analysis** (This section is unchanged from Amendment 8 except 9.2.2.2.8 as noted below.)

**9.2.2.2.8. Commercial quota**

Beginning in year 2, a quota would be allocated to the commercial fishery to reduce exploitation rates on the fully recruited age groups (i.e., fish larger than 9" TL). The commercial quota will be derived from a total allowable catch (TAC). The TAC will be calculated each year based on the target fishing mortality rate and the projected stock size estimates derived from annual stock assessment information.

The TAC will be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch for the years 1988-1992. Based on this data, 78% of the TAC would be allocated to the commercial fishery.

As an example, a TAC was recently adopted by the Council and Commission for 1997. If approved, the TAC for 1997 would be 9.1 million lbs (4,131 mt).

Based on a TAC of 9.1 million lbs, 7.103 million lbs would be allocated to the commercial fishery. The annual TAC will be allocated into three periods based on landings data for 1983-1992. The allocations periods and the associated percent of the total quota would be: January-April (45.11%), May-October (38.95%), and November-December (15.94%) (Table 1).

These three periods were chosen by the Council and Commission in recognition of the seasonal nature of the scup fishery, specifically changes in landings patterns by vessel size and gear type over the year. Based on 1988-92 data, larger vessels have traditionally landed scup from November through April and smaller vessels from May through October (Table 3). In addition, during the winter periods, over 90% of the landings are attributable to otter trawls (Table 8). Most of the landings during these months occur in states from Massachusetts to North Carolina (Table 6). During the summer period, a variety of commercial gears harvest scup including otter trawls, floating traps, pound nets, and hand lines. Landings during these months are concentrated in states from Massachusetts to New York.

The allocation to each period would be based on past landings to minimize effects on traditional landings patterns. In addition, this quota system will allow for an equitable allocation of the commercial quota to northern and southern participants as well as between the smaller day boats and larger offshore vessels.

Discards would be estimated for each period and subtracted from the period TAC to derive the quota for each period. The apportionment of discards to each period recognizes that discards may change over the year. If the data become available, discard estimates would be projected for each period. As such, calculations would allow for higher quotas in periods associated with lower discards. For example, the implementation of the 4.0" mesh regulation should reduce discards in the trawl fisheries. Because these fisheries occur mainly in the winter (Table 8), these reductions could result in higher quotas during the winter periods. Conversely, increased discarding in the summer by inshore boats using small mesh for mixed species fisheries could result in reduced quotas for this period. However, calculations would be complicated by the fact the fisheries are not independent of each other; they depend on the same stock of fish. As such, landings and discards by one fishery will effect the amount of scup available for all fisheries.

Discard data for scup are limited. Currently, only discard data from 1989 from 1993 are available for analysis. These data are highly variable and indicate that discard rates are relatively the same for each of the three periods (Table 4). A recent assessment of scup indicated that analysis of discards by quarter-area combinations did not provide reasonable results due to poor correspondence between sea sampling and

weighout data. However, raised estimates of discards based on sea sampling and weighout data for half year intervals were calculated (Table 5). These data indicate that discard rates were generally higher in the second half of the year.

In addition, with the exception of catches by otter trawl vessels, discards by gear type are not sufficient at the present time to determine discard rates for each gear that harvests scup. Given the limitations of the current data on scup discards, calculations of discards for each period are problematic at the present time. As an example, because of the lack of specific discard data for each period, the commercial discard estimate for 1997 were allocated based on the same landings percentages used for the TAC allocations.

The Council and Commission adopted a discard level of 1.103 million pounds for the commercial fishery for 1997. This discard level was less than that initially projected for 1997, i.e., 1.9 million pounds. The Council and Commission reduced the discard level to 1.103 million pounds to account for the reduction in discards anticipated with the implementation of the 4.0" minimum mesh and 9" TL minimum fish size in the commercial fishery 1996.

This annual discard estimate would be allocated to each period as 0.4976, 0.4296, and 0.1758 million pounds for period 1, 2, and 3, respectively. Based on this discard estimate, the quotas for each period would range from 0.9564 to 2.7066 million pounds (Table 7).

During the summer months, May through October, a state-by-state system would be in effect. In a state-by-state system, quotas would be distributed to the states based on their percentage share of commercial landings for the period May to October, 1983-1992 (Table 6). These state specific shares are specified in Table 2. For example, based on an annual quota of 6.0 million pounds, 2.337 million pounds would be allocated to the summer fishery (Table 7). State allocations would range from 0 to 1.4 million pounds (Table 9).

The state shares during the summer period could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1983-1992. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

A state-by-state quota system would allow for the most equitable distribution of the commercial quota to fishermen during the summer months when smaller boats and fixed gear account for a larger portion of the harvest (Table 8). States would be allocated quota based on historic landings patterns for 1983 to 1992. These years were chosen by the Council and Commission as best representing historical participation in the scup fishery. Specifically, this time period would include years in which scup were more abundant and available to both northern and southern states.

During the summer period, states would have the responsibility of managing their quota for the greatest benefit of the commercial scup industry in their state. States could design allocation systems based on trip limits and seasons. States would also have the ability to transfer or combine quota increasing the flexibility of the system to respond to year to year variations in fishing practices or landings patterns.

A state would be granted de minimus status if the commercial scup landings for the last preceding calendar year for which data are available for the summer period were less than 0.1% of the summer period's quota. Based on 1995 data, the states of Maine, New Hampshire, Delaware, Maryland, Virginia, and North Carolina had landings less than 2,337 pounds (0.1% of the proposed summer periods allocation of 2.337 million pounds) (Table 9). As such, these states could be granted de minimus status for 1997.

In the two winter periods, January-April and November-December, a coastwide quota system would be implemented in conjunction with a system of landing limits. A coastwide system during the winter would allow fishermen to land in any port along the coast. All commercial landings during a winter period would count toward that quota for that period. When the quota had been landed, fishing for and/or landing scup would be prohibited for the remainder of the period. Landings in excess of the allocation for the period would be subtracted from the following years's quota for the same period.

During the winter period, coastwide landing limits would have to be implemented. Allocations without landing limits would encourage derby-style fishing practices that would allow the quota to be landed by larger, more mobile vessels at the beginning of each period. As a result, supplies of scup would be discontinuous and smaller boats would be disadvantaged.

Different landing limits could be implemented for each period to ensure equitable distribution over each period. Landing limits would be implemented by the states and the NMFS and could change over the period. The landing limit for each period would be based on the recommendations of the Scup Monitoring Committee to the Council and Commission. The states would be responsible for notification of state and federal permit holders of initial period landing limits, in period landing limit adjustments, and closures. The fishery would be required to close before the end of the period based on projections by NMFS that the quota would be taken. Vessels with moratorium permits could only land scup caught in the EEZ in coastal states from Maine to North Carolina.

As an example, the Council and Commission have adopted landing limits for the winter periods in 1997. If approved, a landing limit of 30,000 lbs would be implemented in the first winter period. When 85% of that period's allocation was projected to be reached, the landing limit would be reduced to 1,000 lbs. If all trips occurred at the 30,000 lbs landing limit, a total of 77 trips would be made (multiply the first winter period quota of 2,706,808 lbs by 85%, then divide the resulting value by 30,000 lbs). Based on 1988-1992 weighout data, an average of 33 trips were made at this level. In the first winter period, the landing limit would be reduced to 1,000 lbs once 85% of the period's quota was reached. Specifically, the quota for the first winter period is 2,706,808 lbs. Therefore, when 85% of the period's quota is taken (2,300,787 lbs), 406,021 lbs would be allowed to be landed at the 1,000 pound limit. A total of 406 trips ( $406,021/1,000$ ) could be made at this level. Based on 1988-1992 weighout data, an average of 457 trips were made at or above this threshold. For the 1988 to 1992 period, on average, trips landing more than 1,000 lbs per trip accounted for 3% of the total landings and accounted for 67% of the trips (Table 10).

For the second winter period (Nov-Dec) a 12,000 pound landing limit would be established. If all trips occurred at this landing limit, a total of 80 trips could be made (divide 956,473 lbs quota by 12,000 lbs). Based on 1988-1992 weighout data, an average of 28 trips were made at or above this level.

The proposed landing limit system for both winter periods is expected to allow both small and large vessels to continue landing scup according to traditional fishing patterns. The proposed landing limit would increase the likelihood that the landings would be distributed over the entire period. Landing limits would decrease the negative effects associated with unrestricted fishing under a TAC management system, such as irregular supplies or market gluts, and exvessel price fluctuations associated with derby style fishing practices.

It is important to note, however, any graduated system of landing limits would have to account for the administrative burden associated with notice to permit holders. Specifically, NMFS and the states would be responsible for notifying fishermen of closures when the quota was projected to be reached. In addition, the states would be responsible for notification of changes in landing limits during the period. If several changes in the landing limits were planned for a period, notification to each permit holder would have to occur a significant number of times during the period. In addition, NMFS staff have indicated that notification to permit holders would require approximately 2 weeks. Another week would be required to allow vessels that are fishing for scup to return to port before a change in the landing limit or a closure. Thus, approximately 3 weeks would be required to change landing limits and close the fishery for that period. This notification period would be an important consideration in establishing the threshold triggers that would be used for each period to change landing limits. Also, time constraints coupled with the short two month period associated with the second winter period would make the establishment of a graduated system for this period problematic.

An overall quota for the commercial fishery is important to control mortality on the scup population. The minimum size regulation may reduce discard and escape mortality of undersized scup. However, decreases in mortality would occur only with the smaller fish; reductions in mortality would not occur for scup once they reached the legal size of 9" TL. Essentially the fish that contribute the most to the spawning



population, fish 9" TL and larger, would continue to experience high mortality rates; overfishing would not be reduced. The commercial quota will control mortality on fully recruited, older fish.

This management measure will result in a short term reduction in the marketable catch and long term benefits as more fish mature and increase the size of the spawning stock. In addition, a reduction in the mortality of small scup will allow for an increase in yield or harvest as small fish that were previously killed grow larger and add weight to the stock.

Combined with the minimum mesh and size regulations, the commercial quota, will prevent overfishing and reduce waste. As the stock rebuilds and exploitation rates remain constant, commercial quotas would increase.

**9.2.2.5. Prices to consumers** (This section is unchanged from the current FMP.)

### **9.3. RELATION TO RECOMMENDED MEASURES TO EXISTING APPLICABLE LAWS AND POLICIES**

#### **9.3.4. State, Local, and Other Applicable Law and Policies**

**9.3.4.1. State management activities** (This section is unchanged from the current FMP.)

**9.3.4.2. Impact of federal regulations on state management activities**

The management measures of this FMP complement or are identical to those proposed by ASMFC for the coastal states.

#### **9.3.4.3. Coastal Zone Management Program Consistency**

The CZM Act of 1972, as amended, provides measures for ensuring stability of productive fishery habitat while striving to balance development pressures with social, economic, cultural, and other impacts on the coastal zone. It is recognized that responsible management of both coastal zones and fish stocks must involve mutually supportive goals.

The Council must determine whether the amendment will affect a state's coastal zone. If it will, the amendment must be evaluated relative to the state's approved CZM program to determine whether it is consistent to the maximum extent practicable. The states have 45 days in which to agree or disagree with the Councils' evaluation. If a state fails to respond within 45 days, the state's agreement may be presumed. If a state disagrees, the issue may be resolved through negotiation or, if that fails, by the Secretary.

The Regulatory Amendment was reviewed relative to CZM programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina. Letters were sent to all of the states listed along with a hearing draft of the amendment. The letters to all of the states stated that the Council concluded that the amendment would not affect the state's coastal zone and was consistent to the maximum extent practicable with the state's CZM program as understood by the Council.

**9.4. COUNCIL REVIEW AND MONITORING OF THE FMP** (This section is unchanged from the current FMP.)

### **10. REFERENCES** (This section is unchanged from the current FMP.)

**Table 1. Average scup landings by period, Maine to Cape Hatteras, North Carolina, 1983-1992.**

<u>Period</u>	<u>lbs</u>	<u>%</u>
Winter 1 (Jan-Apr)	6,060,687	45.11
Summer (May-Oct)	5,234,050	38.95
Winter 2 (Nov-Dec)	2,142,125	15.94

**Table 2. State shares of scup landings (%) for the summer period, 1983-1992.**

<u>ST</u>	<u>Average Landings by State (May-Oct)</u>	<u>% of Total</u>
ME	6,826	0.1304%
NH	2	0.0000%
MA	810,816	15.4912%
RI	3,170,049	60.5659%
CT	177,897	3.3988%
NY	892,560	17.0530%
NJ	164,510	3.1431%
DE	0	0.0000%
MD	674	0.0129%
VA	9,310	0.1779%
NC	<u>1,407</u>	<u>0.0269%</u>
Total	5,234,050	100.0000%

**Table 3. Scup landings (%) by month and tonnage class, 1988-1992.\***

<u>Month</u>	<u>Tonnage Class</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Jan	1.67	0.47	54.93	42.93
Feb	1.56	0.53	54.44	43.47
Mar	1.19	1.30	54.19	43.32
Apr	1.63	15.54	48.29	34.54
May	7.72	71.91	13.69	6.68
Jun	28.88	21.16	46.45	3.51
Jul	60.00	9.84	29.89	0.28
Aug	67.78	6.96	24.64	0.62
Sep	61.63	7.57	26.96	3.83
Oct	23.14	18.13	47.81	10.91
Nov	7.79	9.16	53.74	29.32
Dec	3.42	1.93	51.09	43.57

\*Data does not include unknown vessels.

Legend: Tonnage class 1 = vessels with less than 5 GRTs, Tonnage class 2 = vessels with 5 to 50 GRTs, Tonnage class 3 = vessels with 51 to 150 GRTs, and Tonnage class 4 = vessels > than 150 GRTs.

Source: NMFS Unpublished General Canvass data.

**Table 4. Sea sample data of scup discards by period, Maine to Virginia, 1989-1993.**

<u>Period</u>	<u>Number</u>		<u>discarded</u> <u>(lbs)</u>	<u>Total</u> <u>(lbs)</u>	<u>%</u> <u>Discarded</u>	<u>Std. Dev.*</u>
	<u>of</u> <u>Trips</u>	<u>kept</u> <u>(lbs)</u>				<u>%</u> <u>Discarded</u>
Winter 1 (Jan-Apr)	97	162,120	114,772	276,892	41%	<u>+35%</u>
Summer (May-Oct)	169	62,651	71,472	134,123	53%	<u>+43%</u>
Winter 2 (Nov-Dec)	95	114,479	120,178	235,557	51%	<u>+38%</u>

\* Based on percent discards per trip.

**Table 5. Total estimated scup discards and landings ('000 lbs) and discard rates by half-year intervals, 1989-1993.**

<u>Year</u>	<u>January-June</u>			<u>July-December</u>		
	<u>Dis</u>	<u>Land</u>	<u>%</u>	<u>Dis</u>	<u>Land</u>	<u>%</u>
1989	3907	6090	39.1	884	2102	29.6
1990	4890	5361	47.7	3657	4157	46.8
1991	2513	10611	19.1	5281	4529	53.8
1992	7465	9683	43.5	5209	3501	59.8
1993	2079	6455	24.4	1082	3329	24.5
Mean	4171	7640	34.8	3223	3524	42.9

Table 6. Scup landings by month, Maine to Cape Hatteras, North Carolina, 1983-1992.

ST	MONTH											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ME	346	176	2,374	2,102	5,320	1,483	0	7	2	14	312	2,164
NH	0	0	0	0	0	0	0	0	0	2	1	0
MA	554	12,067	899	21,342	354,657	115,329	94,699	112,278	80,293	53,561	13,632	1,245
RI	286,490	191,117	358,010	771,070	1,909,709	490,176	151,983	115,137	130,069	372,975	523,998	379,477
CT	6,110	36,278	5,971	20,531	22,102	41,934	25,105	22,870	29,015	36,871	55,831	46,508
NY	123,464	101,608	149,125	183,820	118,304	146,277	160,768	114,325	153,881	199,005	291,232	186,440
NJ	606,607	691,765	912,185	733,436	117,384	1,088	916	869	4,264	39,989	170,902	456,707
MD	2,865	4,911	3,556	6,270	39	0	5	68	58	503	134	801
VA	104,511	101,844	169,518	83,861	4,582	324	207	510	1,582	2,106	3,783	4,626
NC	46,308	69,145	156,279	94,174	1,043	83	8	143	0	131	689	3,646
Total	1,177,255	1,208,910	1,757,915	1,916,607	2,533,141	796,693	433,690	366,206	399,164	705,156	1,060,513	1,081,613

Note: CT monthly landings derived from monthly logbook and dealer data (M. Alexander pers. comm.). These data were used to determine the percentage of annual landings by month. These percentages were then applied to NMFS annual estimates to generate monthly landings.

Source: Unpublished NMFS General Canvass data.

**Table 7. Hypothetical catch, discard and quota distribution by period (million pounds).**

	<u>TAC</u>	<u>Discards</u>	<u>Quota</u>
Annual Commercial TAC =	7.1030	1.1030	6.0000
Winter 1 period (Jan-Apr) =	3.2042	0.4976	2.7066
Summer period (May-Oct) =	2.7666	0.4296	2.3370
Winter 2 period (Nov-Dec) =	1.1322	0.1758	0.9564

**Table 8. Percentage of scup commercial landings by gear and period, Maine to Cape Hatteras, NC, 1983-1992 combined.**

<u>Gear</u>	<u>Winter 1 (Jan-Apr)</u>	<u>Summer (May-Oct)</u>	<u>Winter 2 (Nov-Dec)</u>
Otter Trawl Bottom, Fish	91.92%	45.56%	98.37%
Trawl Midwater, Paired	3.09%	4.57%	0.63%
Pounds Nets, Fish	0.04%	6.75%	0.11%
Floating Traps (Shallow)	2.76%	31.74%	0.01%
Pots And Traps, Fish	0.00%	3.34%	0.12%
Lines Hand, Other	0.00%	6.16%	0.45%
Other Gear	2.19%	1.88%	0.31%

Source: Unpublished NMFS General Canvass data.

**Table 9. State shares (lbs) of a quota of 2.337 million pounds and the 1995 commercial landings for the summer period.**

<u>ST</u>	<u>Summer Period Quota</u>	<u>Summer Period Landings</u>
ME	3,047	0
NH	0	0
MA	362,029	274,185
RI	1,415,425	865,358
CT	79,430	80,157
NY	398,529	239,801
NJ	73,454	37,385
DE	0	0
MD	301	798
VA	4,158	1,555
<u>NC</u>	<u>629</u>	<u>446</u>
Total	2,337,000	1,499,685

Table 10. The total number of vessels, and average number of trips, and average pounds associated with a given threshold (pounds of scup) during the winter periods, 1988-1992.

Period	Threshold	Vessels	%	Trips	%	Pounds	%
Winter 1 (Jan-Apr)	>=1	515	100	1402	100	5,086,003	100
	>=100	384	74	791	56	5,069,561	100
	>=200	345	66	678	48	5,054,242	99
	>=500	284	55	546	39	5,012,545	99
	>=1000	244	47	457	33	4,949,324	97
	>=2000	209	40	370	26	4,823,254	95
	>=3000	186	36	317	23	4,691,800	92
	>=4000	171	33	284	20	4,577,571	90
	>=5000	161	31	254	18	4,444,673	87
	>=6000	140	27	224	16	4,278,360	84
	>=7000	135	26	199	14	4,117,216	81
	>=8000	128	24	181	13	3,981,633	78
	>=9000	119	23	166	12	3,856,197	76
	>=10000	112	21	150	11	3,695,974	73
	>=11000	107	20	136	10	3,555,243	70
	>=12000	99	19	124	9	3,413,109	67
	>=13000	95	18	115	8	3,300,846	65
	>=14000	91	17	106	8	3,176,777	62
	>=15000	88	17	96	7	3,044,118	60
	>=16000	83	16	89	6	2,929,663	58
	>=17000	81	15	83	6	2,823,630	56
	>=18000	77	14	75	5	2,693,961	53
	>=19000	75	14	70	5	2,604,806	51
	>=20000	71	13	64	5	2,487,588	49
	>=30000	46	8	33	2	1,723,775	34

Period	Threshold	Vessels	%	Trips	%	Pounds	%
Winter 2 (Nov-Dec)	>=1	459	100	972	100	1,789,639	100
	>=100	310	67	547	56	1,779,117	99
	>=200	271	59	460	47	1,766,822	99
	>=500	228	49	353	36	1,732,018	97
	>=1000	203	44	271	28	1,672,997	93
	>=2000	163	35	180	19	1,543,396	86
	>=3000	139	30	136	14	1,436,119	80
	>=4000	112	24	107	11	1,333,765	75
	>=5000	104	22	88	9	1,249,486	70
	>=6000	93	20	69	7	1,145,155	64
	>=7000	74	16	58	6	1,073,551	60
	>=8000	68	14	50	5	1,015,371	57
	>=9000	65	14	43	4	955,969	53
	>=10000	59	12	37	4	902,481	50
	>=11000	51	11	33	3	854,316	48
	>=12000	43	9	28	3	797,165	45
	>=13000	40	8	26	3	772,151	43
	>=14000	36	7	22	2	720,824	40
	>=15000	34	7	19	2	686,045	38
	>=16000	31	6	17	2	645,899	36
	>=17000	29	6	16	2	626,020	35
	>=18000	24	5	14	1	591,091	33
	>=19000	23	5	13	1	579,990	32
	>=20000	22	4	12	1	556,877	31
	>=30000	11	2	7	1	435,645	24

Source: Unpublished NMFS Weighout data.

**Table 11. Hypothetical quota distribution by period (million pounds).**

Commercial TAC =	7.1030
Discards =	1.1030
Commercial Quota (TAC-Discards) =	6.0000
Winter 1 period (Jan-Apr) =	2.7066
Summer period (May-Oct) =	2.3370
Winter 2 period (Nov-Dec) =	0.9564

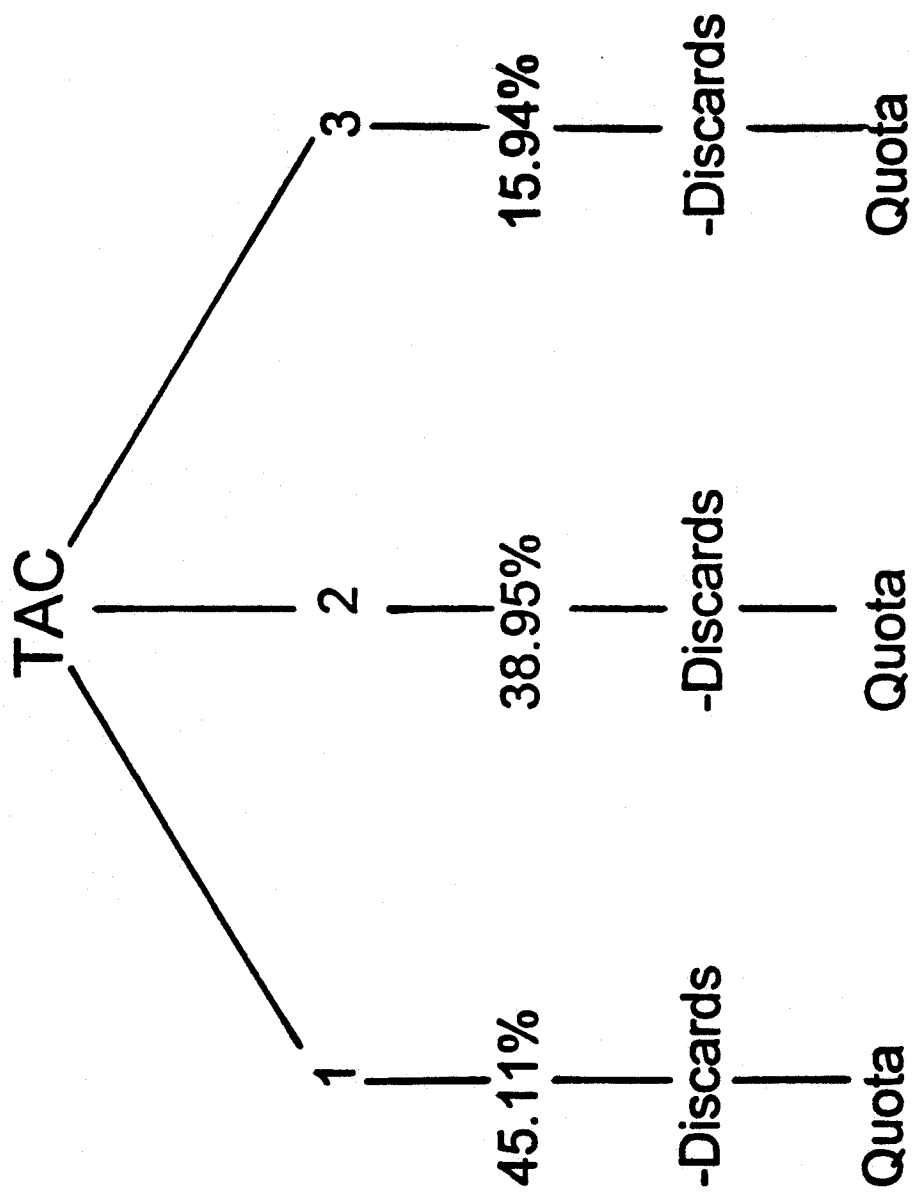


Figure 1. Allocation of the commercial TAC and discards by period.



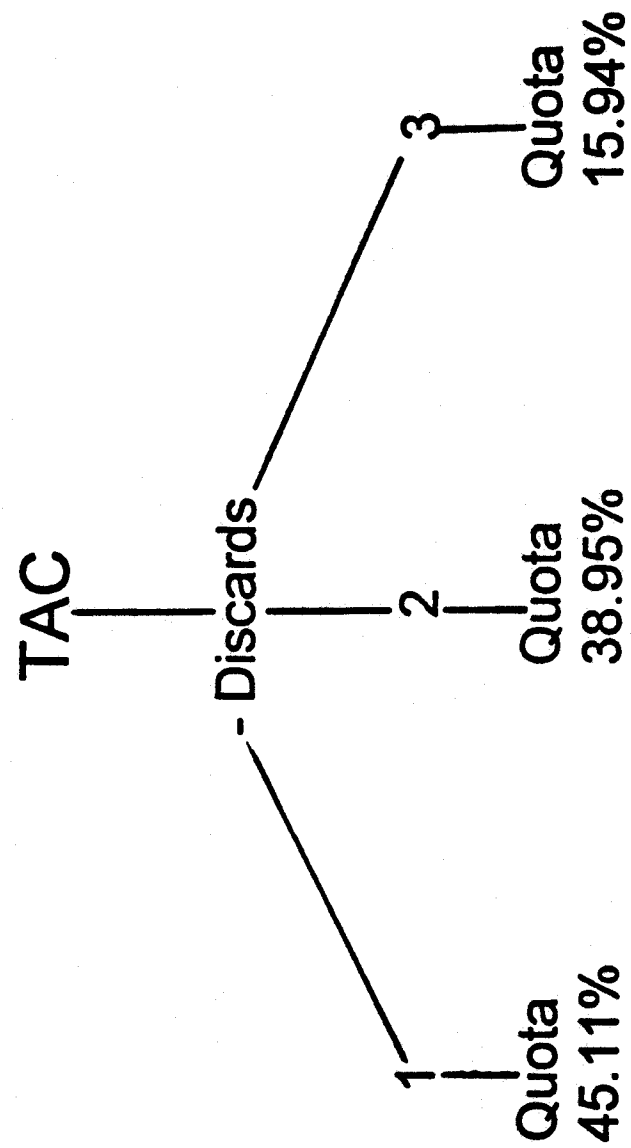
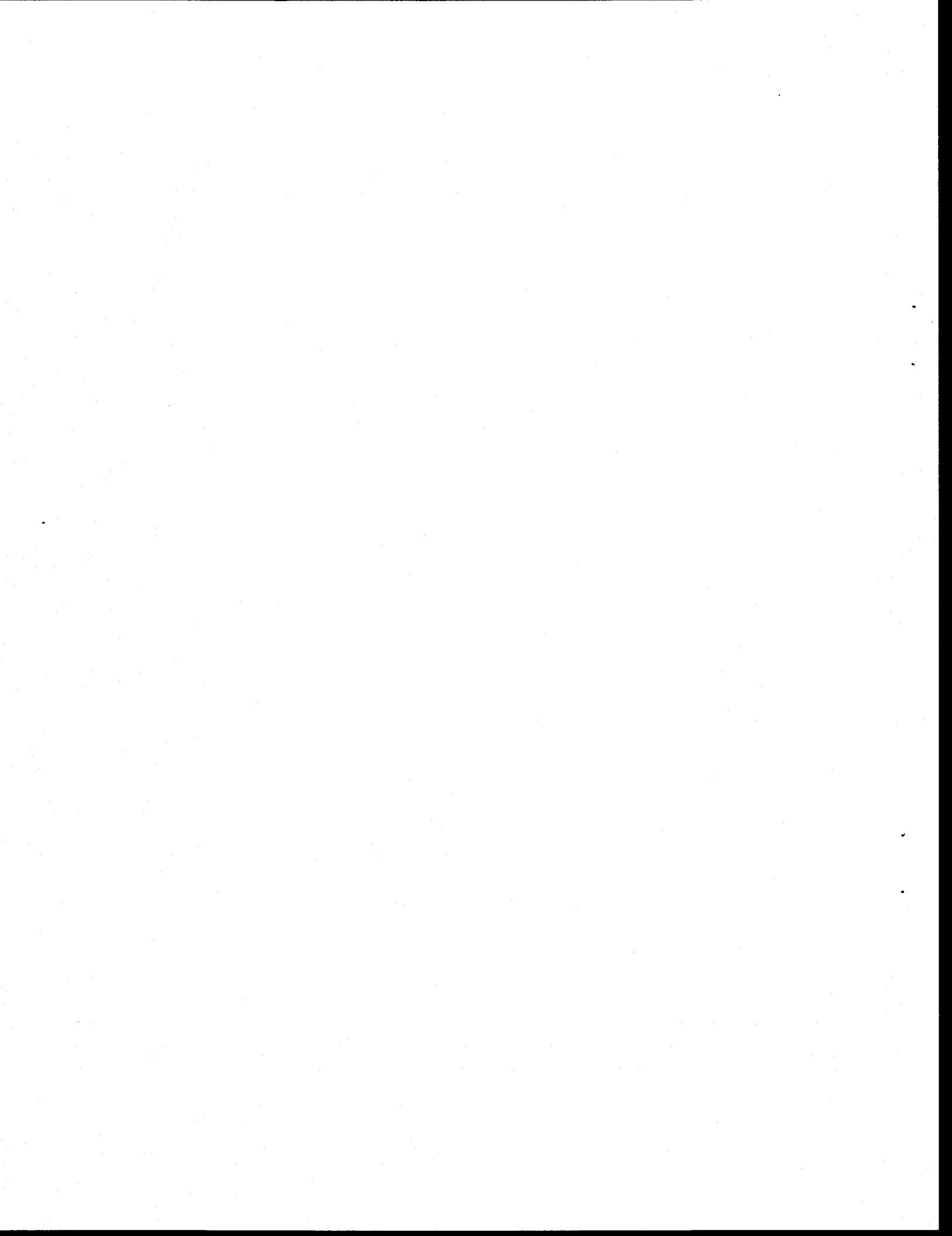


Figure 2. Allocation of the commercial quota by period.



## **APPENDIX 1. ALTERNATIVES TO THE AMENDMENT**

### **1. TAKE NO ACTION AT THIS TIME**

#### **1.1. Description**

This would mean that a coastwide quota would be implemented without landing limits or seasonal allocations.

#### **1.2. Evaluation**

A coastwide quota fails to recognize the seasonal fishing patterns in the commercial scup fishery, i.e., larger vessels operating offshore in the winter and smaller vessels and fixed gear operating inshore during the summer months. The current quota system could allow for a situation in which larger vessels fishing in the first portion of the year filled the annual quota quickly. Unrestricted fishing while the quota was available would increase the possibility of negative effects including irregular supplies, market gluts, and exvessel price fluctuations associated with derby-style fishing practices. In addition, the possibility that the quota would be filled in the first portion of the year could disadvantage select groups of other fishermen. Specifically, smaller vessels and fishermen using fixed gear during the summer months may not have any quota available to them for the year.

### **2. COMMERCIAL LANDING ALLOCATIONS TO EACH PERIOD**

#### **2.1. Description**

This alternative differs from the preferred alternative in that an annual estimate of the discards would be subtracted from the overall commercial TAC and the landings then allocated to each period as a quota (Fig 2). Specifically, beginning in year 2, a quota would be allocated to the commercial fishery to reduce exploitation rates on the fully recruited age groups (i.e., fish larger than 9" TL). The commercial quota will be derived from a total allowable catch (TAC). The TAC will be calculated each year based on the target exploitation rate and the projected stock size estimates derived from annual stock assessment information.

The TAC will be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch (landings plus discards) for the years 1988-1992. Based on this data, 78% of the TAC would be allocated to the commercial fishery. An estimate of total coastwide discards would then be subtracted from the commercial TAC to derive the allowable level of harvest (commercial quota).

The annual quota would then be allocated into three periods based on landings data for 1983-1992. The allocations periods and the associated percent of the total quota would be: January-April (45.11%), May-October (38.95%), and November-December (15.94%) (Table 1).

In the two winter periods, January-April and November-December, a coastwide quota system would be implemented in conjunction with a system of landing limits. Landing limits would remain in effect until the fishery was closed by NMFS. Landing limits would be implemented by the states and the NMFS and could change over the period. The states would be responsible for notification of state and federal permit holders of initial period landing limits, in period landing limit adjustments, and closures. The fishery would be required to close before the end of the period based on projections by NMFS that the quota would be taken. Vessels with moratorium permits could only land scup caught in the EEZ in coastal states from Maine to North Carolina.

Any landings in excess of the quota that occurred during the winter periods (January-April or November-December) would be subtracted from the following year's quota for that period. For example, if the quota was exceeded by 30,000 pounds in the January-April period in 1998, 30,000 pounds would be subtracted from the quota for that period in 1999.

During the first year of quota management (1997), it is certain that a coastwide quota will be implemented before the regulations specified in this amendment take effect. As such, any overages from the first period in 1997 will be deducted from the quota allocation for the November-December 1997 period. Any landings in excess of both winter periods would be deducted from the winter periods for 1998.

The coastal states would work with the NMFS to administer the quotas, coordinate coastwide closures, and enforce state and federal regulations. The quota during the winter periods would apply throughout the management unit, that is, in both state and federal waters. All commercial landings would count toward the quota. When the quota had been landed, fishing for and/or landing scup would be prohibited. The Regional Administrator shall close the EEZ to fishing for scup by commercial vessels with a moratorium permit when the quota has been landed. States would have the responsibility for closures in their state.

During the summer months, a state-by-state system would be in effect. In a state-by-state system, quotas would be distributed to the states based on their percentage share of commercial landings for the period May to October, 1983-1992. These state specific shares are specified in Table 2. The state shares during the summer period could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1983-1992. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

States would have the responsibility for closures in their state and the Regional Administrator would be required to prohibit landings by federally permitted vessels in any state that had reached its quota. States would be allowed to transfer or combine quotas and the states could impose trip limits or other measures to manage their quotas. The system would be the same as that operating under the Summer Flounder FMP for summer flounder.

During the second period, when the state-by-state system is in effect, all scup landed for sale in a state would be applied against the state's annual commercial quota regardless of where the scup were harvested. Any overages of the commercial quota landed in a state would be deducted from that state's annual quota for the following year. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

A state would be granted de minimus status if the commercial scup landings for the last preceding calendar year for which data are available for the summer period were less than 0.1% of the summer period's quota. De minimus status would allow for minimal allocations equal to 0.1% of the quota for the summer period to these states. The total amount of quota allocated to these de minimus states would be subtracted from the summer quota before the remainder was allocated to the other states.

Using data collected through this Amendment (section 9.1.3), NMFS will monitor the fishery to determine when a quota will be reached. It is intended that the states will assist NMFS with data collection.

The annual commercial quota will be set at a range of between 0 and the commercial share of the maximum allowed by the adopted fishing mortality rate reduction strategy. All landings by any

vessel that has a commercial moratorium permit (permit to sell) counts against the quota, whether the scup are caught with an otter trawl, a scallop dredge, hook and line, or any other gear. If the vessel does not have a commercial moratorium permit, fish caught in the EEZ may not be sold and the recreational rules on size, possession, and season apply.

Vessels without moratorium permits and fishing exclusively in state waters could catch and sell scup. All landings by these vessels would also count against the quota. The states would require that all persons who land scup from state waters and do not qualify for federal permits to have a state permit and report all landings. If the state was closed to landings, landings of scup by all vessels would be prohibited.

The annual commercial quota and landing limits would be based on the recommendations of the Scup FMP Monitoring Committee to the Council and ASMFC Board. The Council and Commission would consider those recommendations and submit their recommendations to the Regional Administrator.

## **2.2. Evaluation**

This alternative differs from the preferred alternative in that the allocation to each period would be made after the discard estimate was removed from the overall commercial TAC. Specifically, beginning in year 2, a quota would be allocated to the commercial fishery to reduce exploitation rates on the fully recruited age groups (i.e., fish larger than 9" TL). The commercial quota will be derived from a total allowable catch (TAC). The TAC will be calculated each year based on the target fishing mortality rate and the projected stock size estimates derived from annual stock assessment information.

The TAC will be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch for the years 1988-1992. Based on this data, 78% of the TAC would be allocated to the commercial fishery. An estimate of total coastwide discards would then be subtracted from the commercial TAC to derive the allowable level of harvest (commercial quota).

As an example, a TAC was recently adopted by the Council and Commission for 1997. If approved, the TAC for 1997 would be 9.1 million lbs (4,131 mt). Based on a TAC of 9.1 million lbs, 7.103 million lbs would be allocated to the commercial fishery. Also, the Council and Commission adopted a discard level of 1.103 million pounds for the commercial fishery for 1997. Based on this TAC and discard level the commercial quota for 1997 would be 6.0 million pounds.

The annual quota will be allocated into three periods based on landings data for 1983-1992. The allocations periods and the associated percent of the total quota would be: January-April (45.11%), May-October (38.95%), and November-December (15.94%) (Table 1). Based on this discard estimate, the quotas for each period would range from 0.9564 to 2.7066 million pounds (Table 1).

These three periods were chosen by the Council and Commission in recognition of the seasonal nature of the scup fishery, specifically changes in landings patterns by vessel size and gear type over the year. Based on 1988-92 data, larger vessels have traditionally landed scup from November through April and smaller vessels from May through October (Table 3). In addition, during the winter periods, over 90% of the landings are attributable to otter trawls (Table 8). Most of the landings during these months occur in states from Massachusetts to North Carolina (Table 6). During the summer period, a variety of commercial gears harvest scup including otter trawls, floating traps, pound nets, and hand lines. Landings during these months are concentrated in states from Massachusetts to New York.

The allocation to each period would be based on past landings to minimize effects on traditional landings patterns. In addition, this quota system will allow for an equitable allocation of the commercial quota to northern and southern participants as well as between the smaller day boats and larger offshore vessels.

Discard data for scup are limited. Currently, only discard data from 1989 from 1993 are available for analysis. These data are highly variable and indicate that discard rates are relatively the same for each of the three periods (Table 4). A recent assessment of scup indicated that analysis of discards by quarter-area combinations did not provide reasonable results due to poor correspondence between sea sampling and weighout data. However, raised estimates of discards based on sea sampling and weighout data for half year intervals were calculated (Table 5). These data indicate that discard rates were generally higher in the second half of the year.

In addition, with the exception of catches by otter trawl vessels, discards by gear type are not sufficient at the present time to determine discard rates for each gear that harvests scup. Given the limitations of the current data on scup discards, calculations of discards for each period are problematic at the present time. As such, an annual discard estimate for the entire commercial fishery would be subtracted from the commercial TAC to derive the quota before it was allocated to each period. This subtraction of the discard estimate before the allocation to each period is the fundamental difference between this alternative and the preferred alternative.

During the summer months, May through October, a state-by-state system would be in effect. In a state-by-state system, quotas would be distributed to the states based on their percentage share of commercial landings for the period May to October, 1983-1992 (Table 6). These state specific shares are specified in Table 2. For example, based on an annual quota of 6.0 million pounds, 2.337 million pounds would be allocated to the summer fishery (Table 7). State allocations would range from 0 to 1.4 million pounds (Table 9).

The state shares during the summer period could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1983-1992. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

A state-by-state quota system would allow for the most equitable distribution of the commercial quota to fishermen during the summer months when smaller boats and fixed gear account for a larger portion of the harvest (Table 8). States would be allocated quota based on historic landings patterns for 1983 to 1992. These years were chosen by the Council and Commission as best representing historical participation in the scup fishery. Specifically, this time period would include years in which scup were more abundant and available to both northern and southern states.

During the summer period, states would have the responsibility of managing their quota for the greatest benefit of the commercial scup industry in their state. States could design allocation systems based on trip limits and seasons. States would also have the ability to transfer or combine quota increasing the flexibility of the system to respond to year to year variations in fishing practices or landings patterns.

In the two winter periods, January-April and November-December, a coastwide quota system would be implemented in conjunction with a system of landing limits. A coastwide system during the winter would allow fishermen to land in any port along the coast. All commercial landings during a winter period would count toward that quota for that period. When the quota had been landed, fishing for and/or landing scup would be prohibited for the remainder of the period. Landings in

excess of the allocation for the period would be subtracted from the following years's quota for the same period.

During the winter period, coastwide landing limits would have to be implemented. Allocations without landing limits would encourage derby-style fishing practices that would allow the quota to be landed by larger, more mobile vessels at the beginning of each period. As a result, supplies of scup would be discontinuous and smaller boats would be disadvantaged.

Different landing limits could be implemented for each period to ensure equitable distribution over each period. Landing limits would be implemented by the states and the NMFS and could change over the period. The landing limit for each period would be based on the recommendations of the Scup Monitoring Committee to the Council and Commission. The states would be responsible for notification of state and federal permit holders of initial period landing limits, in period landing limit adjustments, and closures. The fishery would be required to close before the end of the period based on projections by NMFS that the quota would be taken. Vessels with moratorium permits could only land scup caught in the EEZ in coastal states from Maine to North Carolina.

As an example, the Council and Commission have adopted landing limits for the winter periods in 1997. If approved, a landing limit of 30,000 would be implemented in the first winter period. When 85% of that period's allocation was projected to be reached, the landing limit would be reduced to 1,000 lbs. If all trips occurred at the 30,000 lbs landing limit, a total of 77 trips would be made (multiply the first winter period quota of 2,706,808 lbs by 85%, then divide the resulting value by 30,000 lb). Based on 1988-1992 weighout data, an average of 33 trips were made at this level. In the first winter period, the landing limit would be reduced to 1,000 lbs once 85% of the period's quota was reached. Specifically, the quota for the first winter period is 2,706,808 lbs. Therefore, when 85% of the period's quota is taken (2,300,787 lbs), 406,021 lbs would be allowed to be landed at the 1,000 pound limit. A total of 406 trips (406,021/1,000) could be made at this level. Based on 1988-1992 weighout data, an average of 457 trips were made at or above this threshold. For the 1988 to 1992 period, on average, trips landing more than 1,000 lbs per trip accounted for 3% of the total landings and accounted for 67% of the trips (Table 10).

For the second winter period (Nov-Dec) a 12,000 pound landing limit would be established. If all trips occurred at this landing limit, a total of 80 trips would be made (divide 956,473 lbs quota by 12,000 lbs). Based on 1988-1992 weighout data, an average of 28 trips were made at or above this level.

The proposed landing limit system for both winter periods is expected to allow both small and large vessels to continue landing scup according to traditional fishing patterns. The proposed landing limit would increase the likelihood that the landings would be distributed over the entire period. Landing limits would decrease the negative effects associated with unrestricted fishing under a TAC management system, such as irregular supplies or market gluts, and exvessel price fluctuations associated with derby style fishing practices.

It is important to note, however, any graduated system of landing limits would have to account for the administrative burden associated with notice to permit holders. Specifically, NMFS and the states would be responsible for notifying fishermen of closures when the quota was projected to be reached. In addition, the states would be responsible for notification of changes in landing limits during the period. If several changes in the landing limits were planned for a period, notification to each permit holder would have to occur a significant number of times during the period. In addition, NMFS staff have indicated that notification to permit holders would require approximately 2 weeks. Another week would be required to allow vessels that are fishing for scup to return to port before a change in the landing limit or a closure. Thus, approximately 3 weeks would be required to change

landing limits and close the fishery for that period. This notification period would be an important consideration in establishing the threshold triggers that would be used for each period to change landing limits. Also, time constraints coupled with the short two month period associated with the second winter period would make the establishment of a graduated system for this period problematic.

An overall quota for the commercial fishery is important to control mortality on the scup population. The minimum size regulation may reduce discard and escape mortality of undersized scup. However, decreases in mortality would occur only with the smaller fish; reductions in mortality would not occur for scup once they reached the legal size of 9" TL. Essentially the fish that contribute the most to the spawning population, fish 9" TL and larger, would continue to experience high mortality rates; overfishing would not be reduced. The commercial quota will control mortality on fully recruited, older fish.

This management measure will result in a short term reduction in the marketable catch and long term benefits as more fish mature and increase the size of the spawning stock. In addition, a reduction in the mortality of small scup will allow for an increase in yield or harvest as small fish that were previously killed grow larger and add weight to the stock.

Combined with the minimum mesh and size regulations, the commercial quota, will prevent overfishing and reduce waste. As the stock rebuilds and exploitation rates remain constant, commercial quotas would increase.

### **3. CUMULATIVE TRIP LIMITS BY VESSEL**

#### **3.1. Description**

A system of cumulative trip limits would be established for each commercial vessel in the fishery. A specific tonnage would be allotted to each vessel for a specific period.

#### **3.2. Evaluation**

Under this alternative, a commercial vessel would have a specific quota assigned to it. The quota would not be transferable. The amount of quota could be evenly distributed to all participants or based on individual vessel history or allocated by vessel size (length or tonnage class).

If this alternative was implemented, fishermen would have the flexibility to target scup at there own discretion to match market conditions. As such, they could use their scup quota to fish directly for scup or land their scup bycatch. When a vessel had reached its quota, it would no longer be able to retain scup for the duration of the period.

The administrative requirements associated with the implementation of this alternative would be burdensome. In addition, the formula used for individual allocations would require extensive public input and analysis. Finally, for this system to be effective, safeguards to prevent misreporting and high-grading would have to be implemented.



## **APPENDIX 2. REGULATORY IMPACT REVIEW**

### **1. INTRODUCTION**

The National Marine Fisheries Service (NMFS) requires the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new Fishery Management Plan (FMP) or significantly amend an existing plan. The RIR is part of the process of preparing and reviewing FMPs and provides a comprehensive review of the changes in net economic benefits to society associated with proposed regulatory actions. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems. The purpose of the analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way.

The RIR addresses many items in the regulatory philosophy and principles of Executive Order (E.O.) 12866. The RIR also serves as the basis for determining whether any proposed regulation is a "significant regulatory action" under certain criteria provided in E.O. 12866.

#### **1.1. Description of User Groups**

There is no need to change this section at this time.

#### **1.2. Problem Addressed by the Amendment**

The problems to be addressed are discussed in Section 4.2 of this Amendment.

#### **1.3. Management Objectives**

The objectives of the Amendment are described in Section 4.3 of this Amendment.

### **2. METHODOLOGY AND FRAMEWORK FOR ANALYSIS**

The basic approach adopted in this RIR is an assessment of management measures from the standpoint of determining the resulting changes in costs and benefits to society. Net effects should be stated in terms of producer and consumer surpluses for the scup commercial fishery. In an ideal situation, the expected present values of net yield streams over time associated with the different alternatives should be compared in evaluating impacts. The effects of actions were analyzed by employing a combination of quantitative and qualitative technique approaches.

### **3. IMPACTS OF PROPOSED ALTERNATIVES**

#### **3.1. Commercial quota**

Beginning in year 2, a quota would be allocated to the commercial fishery to reduce exploitation rates on the fully recruited age groups (i.e., fish larger than 9" TL). The commercial quota will be derived from a total allowable catch (TAC). The TAC will be calculated each year based on the target fishing mortality rate and the projected stock size estimates derived from annual stock assessment information.

The TAC will be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch for the years 1988-1992. Based on this data, 78% of the TAC would be allocated to the commercial fishery.

As an example, a TAC was recently adopted by the Council and Commission for 1997. If approved, the TAC for 1997 would be 9.1 million lbs (4,131 mt).

Based on a TAC of 9.1 million lbs, 7.103 million lbs would be allocated to the commercial fishery. The annual TAC will be allocated into three periods based on landings data for 1983-1992. The allocations periods and the associated percent of the total quota would be: January-April (45.11%), May-October (38.95%), and November-December (15.94%) (Table 1).

These three periods were chosen by the Council and Commission in recognition of the seasonal nature of the scup fishery, specifically changes in landings patterns by vessel size and gear type over the year. Based on 1988-92 data, larger vessels have traditionally landed scup from November through April and smaller vessels from May through October (Table 3). In addition, during the winter periods, over 90% of the landings are attributable to otter trawls (Table 8). Most of the landings during these months occur in states from Massachusetts to North Carolina (Table 6). During the summer period, a variety of commercial gears harvest scup including otter trawls, floating traps, pound nets, and hand lines. Landings during these months are concentrated in states from Massachusetts to New York.

The allocation to each period would be based on past landings to minimize effects on traditional landings patterns. In addition, this quota system will allow for an equitable allocation of the commercial quota to northern and southern participants as well as between the smaller day boats and larger offshore vessels.

Discards would be estimated for each period and subtracted from the period TAC to derive the quota for each period. The apportionment of discards to each period recognizes that discards may change over the year. If the data become available, discard estimates would be projected for each period. As such, calculations would allow for higher quotas in periods associated with lower discards. For example, the implementation of the 4.0" mesh regulation should reduce discards in the trawl fisheries. Because these fisheries occur mainly in the winter (Table 8), these reductions could result in higher quotas during the winter periods. Conversely, increased discarding in the summer by inshore boats using small mesh for mixed species fisheries could result in reduced quotas for this period. However, calculations would be complicated by the fact the fisheries are not independent of each other; they depend on the same stock of fish. As such, landings and discards by one fishery will effect the amount of scup available for all fisheries.

Discard data for scup are limited. Currently, only discard data from 1989 from 1993 are available for analysis. These data are highly variable and indicate that discard rates are relatively the same for each of the three periods (Table 4). A recent assessment of scup indicated that analysis of discards by quarter-area combinations did not provide reasonable results due to poor correspondence between sea sampling and weighout data. However, raised estimates of discards based on sea sampling and weighout data for half year intervals were calculated (Table 5). These data indicate that discard rates were generally higher in the second half of the year.

In addition, with the exception of catches by otter trawl vessels, discards by gear type are not sufficient at the present time to determine discard rates for each gear that harvests scup. Given the limitations of the current data on scup discards, calculations of discards for each period are problematic at the present time. As an example, because of the lack of specific discard data for

each period, the commercial discard estimate for 1997 were allocated based on the same landings percentages used for the TAC allocations.

The Council and Commission adopted a discard level of 1.103 million pounds for the commercial fishery for 1997. This discard level was less than that initially projected for 1997, i.e., 1.9 million pounds. The Council and Commission reduced the discard level to 1.103 million pounds to account for the reduction in discards anticipated with the implementation of the 4.0" minimum mesh and 9" TL minimum fish size in the commercial fishery 1996.

This annual discard estimate would be allocated to each period as 0.4976, 0.4296, and 0.1758 million pounds for period 1, 2, and 3, respectively. Based on this discard estimate, the quotas for each period would range from 0.9564 to 2.7066 million pounds (Table 7).

During the summer months, May through October, a state-by-state system would be in effect. In a state-by-state system, quotas would be distributed to the states based on their percentage share of commercial landings for the period May to October, 1983-1992 (Table 6). These state specific shares are specified in Table 2. For example, based on an annual quota of 6.0 million pounds, 2.337 million pounds would be allocated to the summer fishery (Table 7). State allocations would range from 0 to 1.4 million pounds (Table 9).

The state shares during the summer period could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1983-1992. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

A state-by-state quota system would allow for the most equitable distribution of the commercial quota to fishermen during the summer months when smaller boats and fixed gear account for a larger portion of the harvest (Table 8). States would be allocated quota based on historic landings patterns for 1983 to 1992. These years were chosen by the Council and Commission as best representing historical participation in the scup fishery. Specifically, this time period would include years in which scup were more abundant and available to both northern and southern states.

During the summer period, states would have the responsibility of managing their quota for the greatest benefit of the commercial scup industry in their state. States could design allocation systems based on trip limits and seasons. States would also have the ability to transfer or combine quota increasing the flexibility of the system to respond to year to year variations in fishing practices or landings patterns.

A state would be granted de minimus status if the commercial scup landings for the last preceding calendar year for which data are available for the summer period were less than 0.1% of the summer period's quota. Based on 1995 data, the states of Maine, New Hampshire, Delaware, Maryland, Virginia, and North Carolina had landings less than 2,337 pounds (0.1% of the proposed summer periods allocation of 2.337 million pounds) (Table 9). As such, these states could be granted de minimus status for 1997.

In the two winter periods, January-April and November-December, a coastwide quota system would be implemented in conjunction with a system of landing limits. A coastwide system during the winter would allow fishermen to land in any port along the coast. All commercial landings during a winter period would count toward that quota for that period. When the quota had been landed, fishing for and/or landing scup would be prohibited for the remainder of the period. Landings in

excess of the allocation for the period would be subtracted from the following years's quota for the same period.

During the winter period, coastwide landing limits would have to be implemented. Allocations without landing limits would encourage derby-style fishing practices that would allow the quota to be landed by larger, more mobile vessels at the beginning of each period. As a result, supplies of scup would be discontinuous and smaller boats would be disadvantaged.

Different landing limits could be implemented for each period to ensure equitable distribution over each period. Landing limits would be implemented by the states and the NMFS and could change over the period. The landing limit for each period would be based on the recommendations of the Scup Monitoring Committee to the Council and Commission. The states would be responsible for notification of state and federal permit holders of initial period landing limits, in period landing limit adjustments, and closures. The fishery would be required to close before the end of the period based on projections by NMFS that the quota would be taken. Vessels with moratorium permits could only land scup caught in the EEZ in coastal states from Maine to North Carolina.

As an example, the Council and Commission have adopted landing limits for the winter periods in 1997. If approved, a landing limit of 30,000 lbs would be implemented in the first winter period. When 85% of that period's allocation was projected to be reached, the landing limit would be reduced to 1,000 lbs. If all trips occurred at the 30,000 lbs landing limit, a total of 77 trips would be made (multiply the first winter period quota of 2,706,808 lbs by 85%, then divide the resulting value by 30,000 lbs). Based on 1988-1992 weighout data, an average of 33 trips were made at this level. In the first winter period, the landing limit would be reduced to 1,000 lbs once 85% of the period's quota was reached. Specifically, the quota for the first winter period is 2,706,808 lbs. Therefore, when 85% of the period's quota is taken (2,300,787 lbs), 406,021 lbs would be allowed to be landed at the 1,000 pound limit. A total of 406 trips (406,021/1,000) could be made at this level. Based on 1988-1992 weighout data, an average of 457 trips were made at or above this threshold. For the 1988 to 1992 period, on average, trips landing more than 1,000 lbs per trip accounted for 3% of the total landings and accounted for 67% of the trips (Table 10).

For the second winter period (Nov-Dec) a 12,000 pound landing limit would be established. If all trips occurred at this landing limit, a total of 80 trips could be made (divide 956,473 lbs quota by 12,000 lbs). Based on 1988-1992 weighout data, an average of 28 trips were made at or above this level.

The proposed landing limit system for both winter periods is expected to allow both small and large vessels to continue landing scup according to traditional fishing patterns. The proposed landing limit would increase the likelihood that the landings would be distributed over the entire period. Landing limits would decrease the negative effects associated with unrestricted fishing under a TAC management system, such as irregular supplies or market gluts, and exvessel price fluctuations associated with derby style fishing practices.

It is important to note, however, any graduated system of landing limits would have to account for the administrative burden associated with notice to permit holders. Specifically, NMFS and the states would be responsible for notifying fishermen of closures when the quota was projected to be reached. In addition, the states would be responsible for notification of changes in landing limits during the period. If several changes in the landing limits were planned for a period, notification to each permit holder would have to occur a significant number of times during the period. In addition, NMFS staff have indicated that notification to permit holders would require approximately 2 weeks. Another week would be required to allow vessels that are fishing for scup to return to port before a

change in the landing limit or a closure. Thus, approximately 3 weeks would be required to change landing limits and close the fishery for that period. This notification period would be an important consideration in establishing the threshold triggers that would be used for each period to change landing limits. Also, time constraints coupled with the short two month period associated with the second winter period would make the establishment of a graduated system for this period problematic.

An overall quota for the commercial fishery is important to control mortality on the scup population. The minimum size regulation may reduce discard and escape mortality of undersized scup. However, decreases in mortality would occur only with the smaller fish; reductions in mortality would not occur for scup once they reached the legal size of 9" TL. Essentially the fish that contribute the most to the spawning population, fish 9" TL and larger, would continue to experience high mortality rates; overfishing would not be reduced. The commercial quota will control mortality on fully recruited, older fish.

This management measure will result in a short term reduction in the marketable catch and long term benefits as more fish mature and increase the size of the spawning stock. In addition, a reduction in the mortality of small scup will allow for an increase in yield or harvest as small fish that were previously killed grow larger and add weight to the stock.

Combined with the minimum mesh and size regulations, the commercial quota, will prevent overfishing and reduce waste. As the stock rebuilds and exploitation rates remain constant, commercial quotas would increase.

The overall economic effects of the 6.0 million pound commercial quota for 1997 are as follows. Based on unpublished NMFS Weighout data (Maine through Virginia) in 1994 total commercial landings for scup were estimated at 8,840,900 lbs. The 1997 quota would reduce commercial scup landings by 2,840,900 lbs pounds when compared to the 1994 commercial landings. The effect on the overall scup exvessel price given the potential reduction in landings from the implementation of the quota proposed in this Amendment would depend on the elasticity of demand for scup. Since no study has estimated the exvessel demand function for scup, revenue changes from the implementation of the new quota were calculated by taking the exvessel price for scup (value divided by pounds) for 1994, and multiplying this value by the potential change in landings. Assuming the 1994 exvessel price of \$0.66 per pound, the 1997 quota would yield a decrease in revenues of \$1,874,994 from the 1994 period. However, based on preliminary unpublished NMFS Weighout data (Maine through Virginia), scup commercial landings were estimated at 5,947,253 lbs and valued at \$5,096,863 (\$0.85 per pound) in 1995. It appears that the decrease in landings from 1994 to 1995 has increase exvessel price for scup during this period. Given preliminary scup landing for 1995, the 1997 quota would be expected to slightly increase exvessel revenue relative to 1994 landings.

The proposed seasonal allocation system with associated landing limits and state by state quotas would allow both small and large vessels to continue landing scup according to traditional fishing patterns. The overall net benefit associated with the proposed system described above would be larger than that associated with the current annual quota system for the following reasons: 1) It recognizes the seasonal fishing patterns in the commercial scup fishery, i.e., larger vessels operating offshore in the winter and smaller vessels and fixed gear operating inshore during the summer months, and 2) it would reduce the negative effects associated with irregular product supply, market gluts, and exvessel price fluctuations.

### **3.2. Alternatives to the Amendment**

The alternatives to the Amendment are described and evaluated in Appendix A of this Amendment document. The first alternative to the Amendment (Take no Action at this Time) would likely encourage fishing practices that would allow the quota to be landed by larger, more mobile vessels at the beginning of the fishing period. This practice would create market gluts or irregular supplies and exvessel price fluctuations. The second alternative to the Amendment (Commercial Landing Allocations to each Period) was rejected because of the lack of flexibility in assigning discards to each period. The apportionment of discards to each period are important because it recognizes that discards may change over the year. The last alternative to the Amendment (Cumulative Trip Limits by Vessel) was rejected because the administrative requirements associated with the implementation of this alternative would be burdensome and the formula used for individual allocations would require extensive public input and analysis.

### **3.3. Summary of Impacts of the Proposed Action**

This regulatory Amendment would establish a commercial quota and a landing limit system for the scup commercial fishery. Assuming the 1994 exvessel price of \$0.66 per pound, the 1997 quota would yield a decrease in revenues of \$1,874,994 from the 1994 period. However, preliminary price data indicates that exvessel prices for scup have increased above the 1994 level (\$0.85/lb in 1995). Higher scup exvessel prices would result in a lower revenue decrease than the one mentioned above from the implementation of this action. The overall net benefit associated with the proposed seasonal allocation system with associated landing limits and state by state quotas would be larger than the net benefit associated with the current annual quota system or the alternatives considered in this document.

The proposed regulatory Amendment, combined with the minimum mesh and size regulations and the commercial quota, will prevent overfishing and reduce waste. As the stock rebuilds and exploitation rates remain constant, commercial quotas would increase. The proposed landing limit system for both winter periods is expected to allow both small and large vessels to continue landing scup according to traditional fishing patterns.

The proposed management system would increase the likelihood that the landings would be distributed over the entire period. Decrease in negative effects associated with unrestricted fishing under a TAC management system (such as irregular supplies or market gluts, and exvessel price fluctuations associated with derby style fishing practices) would result with the implementation of the proposed management system.

## **4. DETERMINATIONS OF A SIGNIFICANT REGULATORY ACTION**

Pursuant to E.O. 12866, a regulation is considered a "significant regulatory action" if it is likely to result in: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

Based on unpublished NMFS weighout data (Maine through Virginia) the total commercial value for scup was estimated at \$5,840,352 in 1994, and at \$5,947,253 (preliminary data) in 1995. The measure considered in this Amendment will not affect total revenues generated by the commercial sector to the extent that a \$100 million annual economic impact will occur.

Based on the preceding information, it is concluded that this regulation if enacted would not constitute a "significant regulatory action."

The Amendment should not have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of US-based enterprises to compete with foreign-based enterprises in domestic or export markets.

## **5. IMPACTS OF THE PLAN RELATIVE TO THE REGULATORY FLEXIBILITY ACT**

### **5.1. Regulatory Flexibility Analysis**

#### **5.1.1. Introduction**

The purpose of the Regulatory Flexibility Act (RFA) is to minimize the adverse impacts from burdensome regulations and record keeping requirements on small businesses, small organizations, and small government entities. The category of small entities likely to be affected by the proposed plan is that of commercial scup fishermen. The impacts of the proposed action on the fishing industry and the economy as a whole were discussed above. The following discussion of impacts centers specifically on the effects of the proposed actions on the mentioned small businesses entities.

#### **5.1.2. Determination of Significant Economic Impact on a Substantial Number of Small Entities**

According to guidelines on regulatory analysis of fishery management actions, a "substantial number" of small entries is more than 20 percent of those small entries engaged in the fishery (NMFS 1994a). The Small Business Administration (SBA) defines a small business in the commercial fishing activity as a firm with receipts of up to \$2.0 million annually. According to unpublished NMFS weighout data (Maine through Virginia) 525 known vessels landed scup in 1994. All of these vessels readily fall within the definition of small business. Since the proposed action will directly and indirectly affect many of these vessels, the "substantial number" criterion will be met. The preliminary unpublished NMFS weighout data for 1995 does not contain the number of boats that participated in the scup fishery for the 1995 period. However, it is expected that the number of participants would be close to the 1994 level.

Economic impacts on small business entities are considered to be "significant" if the proposed action would result in any of the following: a) a reduction in annual gross revenues by more than 5 percent; b) an increase in total costs of production by more than 5 percent as a result of an increase in compliance costs; c) an increase in compliance costs as a percent of sales for small entities at least 10 percent higher than compliance costs as a percent of sales for large entities; d) capital costs of compliance represent a significant portion of capital available to small entities, considering internal cash flow and external financing capabilities; or, e) as a "rule of thumb," 2 percent of small businesses entities being forced to cease business operations (NMFS 1994a).

The proposed commercial quota presented in this Amendment is expected to have an economic effect on the fishery. The effects described in this section are based on changes in fishing patterns from the 1994 period. The effects of the 1997 quota on revenues when compared to the 1994

season is a reduction of \$1,874,994. Assuming this is the initial decrease in annual revenues for all participants in the fishery, and that it is evenly distributed over all participants in the fishery, each business unit would lose \$3,571 (2.13% decrease in total gross revenue).

#### **5.1.3. Explanation of Why The Action is Being Considered**

Refer to the section on Problems for Resolution of the Amendment.

#### **5.1.4. Objectives and Legal Basis for the Rule**

Refer to the section on Management Objectives of the Amendment document. The Magnuson Fishery Conservation and Management Act of 1976 provides the legal basis for the rule.

#### **5.1.5. Demographic Analysis**

There is no need to change this section at this time.

#### **5.1.6. Cost Analysis**

Refer to the section on Regulatory Impact Analysis.

#### **5.1.7. Competitive Effects Analysis**

There are no large businesses involved in the industry, therefore, there are no disproportional small versus large business effects. There are no disproportional costs of compliance among the affected small entities.

#### **5.1.8. Identification of Overlapping Regulations**

The proposed action does not create regulations that conflict with any state regulations or other federal laws.

#### **5.1.9. Conclusions**

The preceding Regulatory Flexibility Analysis indicates that the proposed regulations in this Amendment do not result in significant economic impacts on small entities.

### **6. PAPER WORK REDUCTION ACT OF 1980**

The Paperwork Reduction Act concerns the collection of information. The intent of the Act is to minimize the Federal paperwork burden for individuals, small business, state and local governments, and other persons as well as to maximize the usefulness of information collected by the Federal government.

No data or permit collection program has been proposed within this Amendment.

### **7. IMPACTS OF THE PLAN RELATIVE TO FEDERALISM**

The Amendment does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order 12612.



## **APPENDIX 3. ENVIRONMENTAL ASSESSMENT**

### **1. INTRODUCTION**

The Council began the development of a fishery management plan (FMP) for scup in 1978. Although preliminary work was done to support the development of an FMP, a plan was not completed.

In January 1990, the Council and the Atlantic States Marine Fisheries Commission (Commission) began the development of a fishery management plan for scup as an amendment to the Summer Flounder FMP. However, the development of a scup plan was delayed through a series of amendments to the Summer Flounder FMP and work on a separate Scup FMP was not resumed until 1993.

The Council and the Commission adopted the Scup FMP for Secretarial approval in November, 1995. Subsequently, the National Marine Fisheries Service (NMFS) requested that the scup regulations be incorporated into another FMP to reduce the number of separate fisheries regulations issued by the federal government. As a result, the Scup FMP was incorporated into the summer flounder regulations as Amendment 8 to the Summer Flounder FMP. Amendment 8 was approved by the NMFS on July 29, 1996.

Amendment 8 contains regulations that will implement a coastwide commercial quota beginning 1 January 1997. The amendment stipulates that during the first year of implementation, another system to distribute and manage the commercial quota will be developed by the Council and Commission. This regulatory amendment specifies that system.

This appendix is an examination of the impacts to the environment that would result from implementation of the commercial quota system detailed in the regulatory amendment.

### **2. PURPOSE AND NEED FOR ACTION**

Amendment 8 proposed regulations that would establish a commercial quota beginning 1 January 1997. The quota would be calculated to achieve the target exploitation rate established for that year and would be allocated on a coastwide basis. During the development of Amendment 8, the Council and Commission began the process of defining the system that would be used to allocate the quota. In order to begin the rebuilding of the resource, they decided to submit the amendment before the coastwide quota system was refined so that other regulations, such as minimum size and mesh, could be implemented as quickly as possible. The Council and Commission planned to develop another system during the first year of the amendment to allow for an equitable distribution of the quota to commercial fishermen. The current regulations in Amendment 8 implement a coastwide, commercial quota that will allow the commercial fishery to operate without seasonal allocations or trip limits.

A coastwide quota fails to recognize the seasonal fishing patterns in the commercial scup fishery, i.e., larger vessels operating offshore in the winter and smaller vessels and fixed gear operating inshore during the summer months. The current quota system could allow for a situation in which larger vessels fishing in the first portion of the year filled the annual quota quickly. Unrestricted fishing while the quota was available would increase the possibility of negative effects including irregular supplies, market gluts, and exvessel price fluctuations associated with derby-style fishing practices. In addition, the possibility that the quota would be filled in the first portion of the year could disadvantage select groups of other fishermen. Specifically, smaller vessels and fishermen using fixed gear during the summer months may not have any quota available to them for the year.

### **3. MANAGEMENT OBJECTIVES**

The objectives of the FMP are to:

1. Reduce fishing mortality in the scup fishery to assure that overfishing does not occur.
2. Reduce fishing mortality on immature scup to increase spawning stock biomass.
3. Improve the yield from the fisheries.
4. Promote compatible management regulations between State and Federal jurisdictions.
5. Promote uniform and effective enforcement of regulations.
6. Minimize regulations to achieve the management objectives stated above.

### **4. DISCUSSION OF THE ALTERNATIVES**

A total of four alternatives, including the no action alternative, are considered in this document. With the exception of the no action alternative, each of the alternatives proposes a system to revise the commercial quota system for scup implemented by Amendment 8. The preferred alternative and the number 2 alternative in Appendix 1 are nearly identical except for the way in which discards are subtracted from the total allowable catch (TAC) for the calculation of the period quotas. Each of these alternatives would result in quota allocations for three periods. However, the preferred alternative would allocate the TAC and discards into three periods before discards estimates were subtracted to derive the quotas for each period. The number 2 alternative in the appendix would subtract the annual discard estimate from the TAC before the allocation of the quota to each period. The no action alternative would mean that the commercial quota would be implemented coastwide without period allocations or landing limits, i.e., the system implemented by Amendment 8 would continue. The final alternative would assign quotas to individual vessels.

#### **Alternative 1 - Commercial TAC allocations by period**

This is the preferred alternative to revise the commercial quota system for scup. The commercial TAC would be calculated in a manner identical to that specified in Amendment 8. Specifically, the commercial quota will be derived from a total allowable catch (TAC). The TAC will be calculated each year based on the target fishing mortality rate and the projected stock size estimates derived from annual stock assessment information.

The TAC will be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch for the years 1988-1992. Based on this data, 78% of the TAC would be allocated to the commercial fishery.

As an example, a TAC was recently adopted by the Council and Commission for 1997. If approved, the TAC for 1997 would be 9.1 million lbs (4,131 mt). Based on a TAC of 9.1 million lbs, 7.103 million lbs would be allocated to the commercial fishery.

This alternative differs from the quota system in Amendment 8 because it would allocate the TAC into three periods. Specifically, the annual commercial TAC would be divided into three periods based on the following percentages: January-April (45.11%), May-October (38.95%), and November-December (15.94%).

These three periods were chosen by the Council and Commission in recognition of the seasonal nature of the scup fishery, specifically changes in landings patterns by vessel size and gear type over the year. Based on 1988-92 data, larger vessels have traditionally landed scup from November through April and smaller vessels from May through October (Table 3). In addition, during the winter periods, over 90% of the landings are attributable to otter trawls (Table 8). Most of the landings during these months occur in states from Massachusetts to North Carolina (Table 6). During the summer period, a variety of commercial gears harvest scup including otter trawls, floating traps, pound nets, and hand lines. Landings during these months are concentrated in states from Massachusetts to New York.

The allocation to each period would be based on past landings to minimize effects on traditional landings patterns. In addition, this quota system will allow for an equitable allocation of the commercial quota to northern and southern participants as well as between the smaller day boats and larger offshore vessels.

Discards would be estimated for each period and subtracted from the period TAC to derive the quota for each period. This is the major difference between this alternative and the other alternatives. Specifically, projected discards would be apportioned into the three periods based on the available data.

The apportionment of discards to each period recognizes that discards may change over the year. If the data become available, discard estimates would be projected for each period. As such, calculations would allow for higher quotas in periods associated with lower discards. For example, the implementation of the 4.0" mesh regulation should reduce discards in the trawl fisheries. Because these fisheries occur mainly in the winter (Table 8), these reductions could result in higher quotas during the winter periods. Conversely, increased discarding in the summer by inshore boats using small mesh for mixed species fisheries could result in reduced quotas for this period. However, calculations would be complicated by the fact the fisheries are not independent of each other; they depend on the same stock of fish. As such, landings and discards by one fishery will effect the amount of scup available for all fisheries.

Currently, discard data for scup are limited. Currently, only discard data from 1989 from 1993 are available for analysis. These data are highly variable and indicate that discard rates are relatively the same for each of the three periods (Table 4). A recent assessment of scup indicated that analysis of discards by quarter-area combinations did not provide reasonable results due to poor correspondence between sea sampling and weighout data. However, raised estimates of discards based on sea sampling and weighout data for half year intervals were calculated (Table 5). These data indicate that discard rates were generally higher in the second half of the year.

In addition, with the exception of catches by otter trawl vessels, discards by gear type are not sufficient at the present time to determine discard rates for each gear that harvests scup. Given the limitations of the current data on scup discards, calculations of discards for each period are problematic at the present time. As an example, because of the lack of specific discard data for each period, the commercial discard estimate for 1997 were allocated based on the same landings percentages used for the TAC allocations.

The Council and Commission adopted a discard level of 1.103 million pounds for the commercial fishery for 1997. This discard level was less than that initially projected for 1997, i.e., 1.9 million pounds. The Council and Commission reduced the discard level to 1.103 million pounds to account for the reduction in discards anticipated with the implementation of the 4.0" minimum mesh and 9" TL minimum fish size in the commercial fishery 1996.

This annual discard estimate would be allocated to each period as 0.4976, 0.4296, and 0.1758 million pounds for period 1, 2, and 3, respectively. Based on this discard estimate, the quotas for each period would range from 0.9564 to 2.7066 million pounds (Table 7).

During the summer months, May through October, a state-by-state system would be in effect. In a state-by-state system, quotas would be distributed to the states based on their percentage share of commercial landings for the period May to October, 1983-1992 (Table 6). These state specific shares are specified in Table 2. For example, based on an annual quota of 6.0 million pounds, 2.337 million pounds would be allocated to the summer fishery (Table 7). State allocations would range from 0 to 1.4 million pounds (Table 9).

The state shares during the summer period could be revised based on the recommendations of the Commission to account for any changes in the landings data for the base years 1983-1992. Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota.

A state-by-state quota system would allow for the most equitable distribution of the commercial quota to fishermen during the summer months when smaller boats and fixed gear account for a larger portion of the harvest (Table 8). States would be allocated quota based on historic landings patterns for 1983 to 1992. These years were chosen by the Council and Commission as best representing historical participation in the scup fishery. Specifically, this time period would include years in which scup were more abundant and available to both northern and southern states.

During the summer period, states would have the responsibility of managing their quota for the greatest benefit of the commercial scup industry in their state. States could design allocation systems based on trip limits and seasons. States would also have the ability to transfer or combine quota increasing the flexibility of the system to respond to year to year variations in fishing practices or landings patterns.

In the two winter periods, January-April and November-December, a coastwide quota system would be implemented in conjunction with a system of landing limits. A coastwide system during the winter would allow fishermen to land in any port along the coast. All commercial landings during a winter period would count toward that quota for that period. When the quota had been landed, fishing for and/or landing scup would be prohibited for the remainder of the period. Landings in excess of the allocation for the period would be subtracted from the following years's quota for the same period.

During the winter period, coastwide landing limits would have to be implemented. Allocations without landing limits would encourage derby-style fishing practices that would allow the quota to be landed by larger, more mobile vessels at the beginning of each period. As a result, supplies of scup would be discontinuous and smaller boats would be disadvantaged.

Different landing limits could be implemented for each period to ensure equitable distribution over each period. Landing limits would be implemented by the states and the NMFS and could change over the period. The landing limit for each period would be based on the recommendations of the Scup Monitoring Committee to the Council and Commission. The states would be responsible for notification of state and federal permit holders of initial period landing limits, in period landing limit adjustments, and closures. The fishery would be required to close before the end of the period based on projections by NMFS that the quota would be taken. Vessels with moratorium permits could only land scup caught in the EEZ in coastal states from Maine to North Carolina.

As an example, the Council and Commission have adopted landing limits for the winter periods in

1997. If approved, a landing limit of 30,000 lbs would be implemented in the first winter period. When 85% of that period's allocation was projected to be reached, the landing limit would be reduced to 1,000 lbs. In the second winter period, the landing limit would be 12,000 lbs with closure of the fishery when the quota for the period was projected to be reached. Based on 1988-1992 data, these landing limits could prevent the early harvest of the entire quota for each period.

#### **Alternative 2 - Commercial Landing Allocations to Each Period**

This rejected alternative is nearly identical to the system described in Alternative 1. The only difference between this alternative and Alternative 1 relates to the derivation of the quotas for each of the periods. Specifically, the commercial TAC would be calculated as described above. However, an annual estimate of discards would then be subtracted from the annual TAC. The resulting level of total allowable landings would then be allocated to each period as a commercial quota.

This alternative was rejected by the Council and Commission because it did not give them the flexibility they required in regard to the allocation of the discards over the year. Specifically, the Council and Commission recognize that the nature of the scup fishery changes over the year. As such, the use of a single discard estimate may not account for the annual variability that could be associated with discard levels in each period.

For example, the implementation of the 4.0" mesh regulation should reduce discards in the trawl fisheries. Because these fisheries occur mainly in the winter (Table 8), these reductions could result in higher quotas during the winter periods. Conversely, increased discarding in the summer by inshore boats using small mesh for mixed species fisheries could result in reduced quotas for this period.

The specifics on quota implementation are identical to that described above for Alternative 1. Specifically, once the quotas were derived for each period, using the same landings percentages as indicated above, the system would operate the same. The quota would be coastwide in the winter periods with associated landing limits and in the summer period, allocations would be state by state.

#### **Alternative 3 - Take no action at this time**

This alternative would mean that the quota system established by Amendment 8 would remain in effect. Specifically, a coastwide commercial quota would be derived as specified in Alternative 2 above. The resulting level of total allowable landings would then be allocated as one coastwide quota for the entire year. In addition, no seasonal allocations or landing limits would be implemented.

The Council and Commission rejected this alternative because allocations without landing limits could encourage derby-style fishing practices that would allow the quota to be landed by larger, more mobile vessels at the beginning of the year. Supplies of scup would be discontinuous and smaller boats would be disadvantaged.

#### **Alternative 4 - Cumulative trip limits by vessel**

This alternative would establish a quota system in which cumulative trip limits would be established for each commercial vessel in the fishery. A commercial quota would be derived from a TAC as specified in Alternative 2 above and a specific tonnage of scup would then be allotted to each vessel for the year. The total vessel allocations would equal the commercial quota for the year.

If this alternative was implemented, fishermen would have the flexibility to target scup at their own discretion to match market conditions. As such, they could use their scup quota to fish directly for scup or land their scup bycatch. When a vessel had reached its quota, it would no longer be able to retain scup for the duration of the period.

The Council and Commission rejected this alternative because the administrative requirements associated with the implementation of this alternative would be burdensome. In addition, the formula used for individual allocations would require extensive public input and analysis. Finally, for this system to be effective, safeguards to prevent misreporting and high-grading would have to be implemented.

## **5. ESTIMATED ENVIRONMENTAL IMPACTS**

The discussion of impacts is conducted in accordance with the guidance presented in NOAA Administrative Order 216-6 and the Council on Environmental Quality's regulations at 1508.9.

Alternatives 1, 2, and 4 would modify the commercial quota system implemented by Amendment 8 regulations. Alternative 3 would mean that Amendment 8 regulations would remain unchanged. However, each alternative would result in a quota for the commercial scup fishery. None of the alternatives would change the overall quota. As such, the impacts of each alternative are not significantly different. The quota will have a positive environmental benefit because the associated reduction in fishing mortality on the scup stock will allow the resource to rebuild and contribute to a well-balanced, healthy marine ecosystem. The physical and biological environment in which this fishery takes place is fully described in the FEIS of Amendment 8.

An overall quota for the commercial fishery is important to control mortality on the scup population. The minimum size and mesh regulations implemented by Amendment 8 may reduce discard and escape mortality of undersized scup. However, decreases in mortality would occur only with the smaller fish; reductions in mortality would not occur for scup once they reached the legal size of 9" TL. Essentially the fish that contribute the most to the spawning population, fish 9" TL and larger, would continue to experience high mortality rates; overfishing would not be reduced. The commercial quota will control mortality on fully recruited, older fish.

Combined with the minimum mesh and size regulations, the commercial quota will prevent overfishing and reduce waste. Quotas will result in a short term reduction in the marketable catch and long term benefits as more fish mature and increase the size of the spawning stock.

The preferred alternative recognizes the seasonal nature of the scup fishery and allocates the TAC and discards into three periods. Allowing for the possibility that discards could be estimated for each period increases the flexibility that managers will have to respond to new data as it becomes available. As such, this alternative will allow for equitable allocation of the quota over the year resulting in a more stable supply and prices for fishermen. As the stock rebuilds and exploitation rates remain constant, commercial quotas would increase.

The effect on the overall scup exvessel price given the potential reduction in landings from the implementation of the quota proposed in this Amendment would depend on the elasticity of demand for scup. Since no study has estimated the exvessel demand function for scup, revenue changes from the implementation of the new quota were calculated by taking the exvessel price for scup (value divided by pounds) for 1994, and multiplying this value by the potential change in landings. Assuming the 1994 exvessel price of \$0.66 per pound, the 1997 quota would yield a decrease in revenues of \$1,874,994 from the 1994 period. However, based on preliminary unpublished NMFS Weighout data (Maine through Virginia), scup commercial landings were estimated at 5,947,253 lbs

and valued at \$5,096,863 (\$0.85 per pound) in 1995. It appears that the decrease in landings from 1994 to 1995 has increase exvessel price for scup during this period. Given the preliminary scup landing data for 1995, the 1997 quota would be expected to slightly increase exvessel revenue relative to 1994 landings.

#### **6. LIST OF AGENCIES AND PERSONS CONSULTED IN FORMULATING THE PROPOSED ACTION**

In preparing this regulatory amendment, the Council consulted with the Atlantic States Marine Fisheries Commission (ASMFC), NMFS, the New England Fishery Management Council, the South Atlantic Fishery Management Council, the Fish and Wildlife Service, the Department of State, and the States of New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia through their membership on the Council. In addition to the States that are members of this Council, Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, and North Carolina were also consulted through the Coastal Zone Management Program consistency process.

#### **7. LIST OF PREPARERS OF THE ENVIRONMENTAL ASSESSMENT**

This amendment was prepared by a team of fishery managers and scientists with special expertise in the summer flounder resource including:

Mid-Atlantic Council Demersal Fisheries Committee - Mid-Atlantic Council members Richard Cole (Chair, DE), Joy Wilson (Vice Chair, VA), Jack Travelstead (VA), Charlie Bergmann (NJ), Rob Winkel (NJ), W. Peter Jensen (MD), Gordon Colvin (NY), James Gilford (MD), Alan Weiss (PA), Robert Hamilton (NY), and Jack Dunnigan (ASMFC); South Atlantic Council members Dennis Spitsbergen and Gerald Schill; and New England Council member James McCauley.

ASMFC Summer Flounder Management Board - Ernest Beckwith (CT), David Borden (RI), Wayne Brewer (NY), A. C. Carpenter (Potomac River Fisheries Comm.), Phil Coates (MA), Rick Cole (DE), Gordon Colvin (NY), Tom McCloy (NJ), James Geiger (USFWS), W. Peter Jensen (MD), Sen. Owen Johnson (NY), Harry Mears (NMFS), William Pruitt (VA), & Dennis Spitsbergen (NC).

Summer Flounder Monitoring Committee - David Keifer (Chair, MAFMC), Phil Haring (NEFMC), Gregg Waugh (SAFMC), Hannah Goodale (NMFS NERO), Mark Terceiro (NMFS NEFC), John Merriner (NMFS SEFC), John Carmichael (ASMFC), Dick Sisson (RI), Rick Monaghan (NC), John Mason (NY), David Pierce (MA), Bruce Halgren (NJ), Herb Austin (VIMS), and Dr. Wilson Laney (USFWS).

MAFMC staff - David R. Keifer, Christopher M. Moore, Thomas B. Hoff, Richard Seagraves, José L. Montefiez, and Clayton E. Heaton.

#### **8. FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT**

Having reviewed the environmental assessment and the available information relating to the proposed action, I have determined that there will be no significant adverse environmental impact resulting from the action and that preparation of an environmental impact statement on the action is not required by Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

\_\_\_\_\_  
Assistant Administrator for  
Fisheries, NOAA

\_\_\_\_\_  
Date





## APPENDIX 4. PROPOSED REGULATIONS

Billing Code:

DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
50 CFR Part 648  
[Docket No. ; I.D. ]  
RIN

### Summer Flounder and Scup Fishery; Regulatory Amendment

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Proposed rule; request for comments.

**SUMMARY:** NMFS issues this proposed rule and request for comments to implement a provision of a Regulatory Amendment to the Fishery Management Plan (FMP) for the Summer Flounder and Scup Fishery, which has been submitted by the Mid-Atlantic Fishery Management Council (Council). This measure would revise the commercial quota system for scup.

**DATES:** Public comments must be received on or before [insert date 45 days after date of publication in the Federal Register].

**ADDRESSES:** Comments on this proposed rule should be sent to Dr. Andrew A. Rosenberg, Administrator, Northeast Regional Office, NMFS, One Blackburn Drive, Gloucester, MA 01930. Mark the outside of the envelope, "Comments on the Scup Regulatory Amendment of the Summer Flounder and Scup Plan."

Copies of the Regulatory Amendment are available upon request from David R. Keifer, Executive Director, Mid-Atlantic Fishery Management Council, Room 2115, Federal Building, 300 South New Street, Dover, DE 19904.

**FOR FURTHER INFORMATION CONTACT:** Regina L. Spallone, Fishery Policy Analyst, 508-281-9221.

### SUPPLEMENTARY INFORMATION:

#### Background

The Council began the development of a fishery management plan (FMP) for scup in 1978. Although preliminary work was done to support the development of an FMP, a plan was not completed.

In January 1990, the Council and the Atlantic States Marine Fisheries Commission (Commission) began the development of a fishery management plan for scup as an amendment to the Summer Flounder FMP. However, the development of a scup plan was delayed through a series of amendments to the Summer Flounder FMP and work on a separate Scup FMP was not resumed until 1993.

The Council and the Commission adopted the Scup FMP for Secretarial approval in November, 1995. Subsequently, the National Marine Fisheries Service (NMFS) requested that the scup regulations be incorporated into another FMP to reduce the number of separate fisheries regulations issued by the federal government. As a result, the Scup FMP was incorporated into the summer flounder regulations as Amendment 8 to the Summer Flounder FMP. Amendment 8 was approved by the NMFS on July 29, 1996.

Amendment 8 contains regulations that will implement a coastwide commercial quota beginning 1 January 1997. The amendment stipulates that during the first year of implementation, another system to

distribute and manage the commercial quota will be developed by the Council and Commission. This regulatory amendment specifies that system.

Amendment 8 proposed regulations that would establish a commercial quota beginning 1 January 1997. The quota would be calculated to achieve the target exploitation rate established for that year and would be allocated on a coastwide basis. During the development of Amendment 8, the Council and Commission began the process of defining the system that would be used to allocate the quota. In order to begin the rebuilding of the resource, they decided to submit the amendment before the coastwide quota system was refined so that other regulations, such as minimum size and mesh, could be implemented as quickly as possible. The Council and Commission planned to develop another system during the first year of the amendment to allow for an equitable distribution of the quota to commercial fishermen. The current regulations in Amendment 8, implement a coastwide, commercial quota that will allow the commercial fishery to operate without trip limits or seasonal allocations. As such, it is possible that large vessels fishing in the first portion of the year will fill the annual quota quickly, closing the fishery before other participants have an opportunity to fish on the stock.

The Regulatory Amendment was submitted to NMFS on October 2, 1996. The Regulatory Amendment was prepared by the Council and Commission, in consultation with the New England and South Atlantic Fishery Management Councils. A notice of availability for the proposed amendment was published in the Federal Register on , 1996. Copies of the Regulatory Amendment are available from the Council upon request (see ADDRESSES). The amendment revises the summer flounder (Paralichthys dentatus) and scup (Stenotomus chrysops) FMP to include scup quota management measures pursuant to the Magnuson Fishery Conservation and Management Act, as amended (Magnuson Act).

#### Proposed Measure

This regulatory amendment would revise the commercial quota system for scup. Specifically, the annual commercial TAC (total allowable catch) would be allocated into three periods: January-April (45.11%), May-October (38.95%), and November-December (15.94%). Discards would be estimated for each period and subtracted from the TACs to derive the quotas for each period. A coastwide quota and landing limit system would be used during the winter periods (January-April and November-December). During the summer period (May-October) a state-by-state quota system would be in effect. The commercial fishery would close once the allocation for a given period was reached. Any overages during the winter periods would be subtracted from the period's allocation for the following year. Any quota overages by a state during the summer period would be deducted from the states share the following year.

#### Classification

Section 304(a)(1)(D)(ii) of the Magnuson Act, as amended, requires NMFS to publish regulations proposed by a Council within 15 days of receipt of the amendment and proposed regulations. At this time, NMFS has not determined whether the measures in the Regulatory Amendment that these rules would implement are consistent with the national standards, other provisions of the Magnuson Act, and other applicable law. NMFS, in making that determination, will take into account the information, views, and comments received during the comment period.

The Council prepared an EA for the Regulatory Amendment, a copy of which may be obtained from the Council (see ADDRESSES). The Council has determined that this rule, if implemented, would be consistent to the maximum extent practicable with the approved coastal management programs of the Atlantic states.

The Assistant General Counsel for Legislation and Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration, that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities.

This proposed rule contains no collection-of-information requirements subject to the Paperwork Reduction Act.

List of Subjects in 50 CFR Part 648

Fisheries, Fishing, Reporting and recordkeeping requirements.

Dated:

For the reasons set out in the preamble, 50 CFR part 648 is amended as follows:

**PART 648--FISHERIES OF THE NORTHEASTERN UNITED STATES**

1. The authority citation for part 648 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

2. In § 648.120, paragraph (b)(1) is revised to read as follows:

• • • • •

**§ 648.120 Catch quotas and other restrictions.**

• • • • •

(b) Recommended measures. Based on this review, the Scup Monitoring Committee shall recommend the following measures to the Demersal Species Committee of the MAFMC and the Commission to assure that the exploitation rate specified in paragraph (a) of this section will not be exceeded:

(1) The commercial quota will be set from a range of 0 to the maximum allowed to achieve the specified exploitation rate. The annual commercial TAC (total allowable catch) would be allocated into three periods: January-April (45.11%), May-October (38.95%), and November-December (15.94%). Discards would be estimated for each period and subtracted from the TACs to derive the quotas for each period. A coastwide quota and landing limit system would be used during the winter periods (January-April and November-December). During the summer period (May-October) a state-by-state quota system would be in effect. Any quota overages during the winter periods would be subtracted from the period's allocation for the following year. Any quota overages by a state during the summer period would be deducted from the states share the following year.

(i) A state would be granted de minimus status during the summer period if the commercial scup landings for the last preceding calendar year for which data are available for the summer period were less than 0.1% of the summer period's quota. De minimus status would allow for minimal allocations equal to 0.1% of the quota for the summer period to these states. The total amount of quota allocated to these de minimus states would be subtracted from the summer quota before the remainder was allocated to the other states.

(ii) The distribution of the state-by-state summer period quota shall be based on the following table:

<u>State</u>	<u>% of Total</u>
ME	0.1304%
NH	0.0000%
MA	15.4912%
RI	60.5659%
CT	3.3988%
NY	17.0530%
NJ	3.1431%
DE	0.0000%
MD	0.0129%
VA	0.1779%
NC	<u>0.0269%</u>
Total	100.0000%

The Regional Administrator may change the distribution of the summer period quota among the states based on the recommendation of the Commission and following a public comment period.

\* \* \* \* \*

2. Paragraph § 648.121 is revised to read as follows:

§ 648.121 Closure.

The Regional Administrator will monitor the harvest of commercial quota based on dealer reports, state data, and other available information and shall determine the date when the commercial allocation for a given period will be harvested. The Regional Administrator shall close the EEZ to fishing for scup by commercial vessels for the remainder of the calendar year by publishing notification in the Federal Register advising that, effective upon a specific date, the commercial quota has been harvested, and notifying vessel and dealer permit holders that no commercial quota is available for landing scup.

## APPENDIX 5. ABBREVIATIONS AND DEFINITIONS OF TERMS

**Act (MFCMA)** - the Magnuson Fishery Conservation and Management Act of 1976, as amended, 16 USC 1801 et seq.

**Adjusted dollars** - dollars standardized to a base year based on the Consumer Price Index.

**ASMFC (Commission)** - Atlantic States Marine Fisheries Commission.

**CFR** - Code of Federal Regulations.

**Charter or party boat** - any vessel which carries passengers for hire to engage in fishing.

**Committee** - the Scup FMP Review and Monitoring Committee. The Committee is made up of staff representatives of the Mid-Atlantic, New England, and South Atlantic Fishery Management Councils, the Commission, the Northeast Regional Office of NMFS, the Northeast Fisheries Center, and the Southeast Fisheries Center. The MAFMC Executive Director or his designee chairs the Committee.

**Council (MAFMC)** - the Mid-Atlantic Fishery Management Council.

**CPI** - Consumer Price Index; a comparative ratio of a certain group of goods across time.

**CPUE** - catch per unit of effort.

**Domestic Annual Harvest (DAH)** - the capacity of US fishermen, both commercial and recreational, to harvest and their intent to use that capacity.

**Domestic Annual Processing (DAP)** - the capacity of US processors to process, including freezing, and their intent to use that capacity.

**Exclusive Economic Zone (EEZ)** - the zone contiguous to the territorial sea of the US, the inner boundary of which is a line coterminous with the seaward boundary of each of the coastal States and the outer boundary of which is a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured.

**Fishing for scup** - any activity, other than scientific research vessel activity, which involves: (a) the catching, taking, or harvesting of scup; (b) any other activity which can reasonably be expected to result in the catching, taking, or harvesting of scup; or (c) any operations at sea in support of, or in preparation for, any activity described in paragraphs (a) or (b) of this definition.

**Fishing mortality rate** - the part of the total mortality rate (which also includes natural mortality) applying to a fish population that is caused by man's harvesting. Fishing mortality is usually expressed as an instantaneous rate ( $F$ ), and can range from 0 for no fishing to very high values such as 1.5 or 2.0. The corresponding annual fishing mortality rate ( $A$ ) is easily computed but not frequently used. Values of  $A$  that would correspond to the  $F$  values of 1.5 and 2.0 would be 78% and 86%, meaning that there would be only 22% and 14% of the fish alive (without any natural mortality) at the end of the year that were alive at the beginning of the year. Fishing mortality rates are estimated using a variety of techniques, depending on the available data for a species or stock.

**$F_{0.1}$**  - the rate of fishing mortality for a given method of fishing at which the increase in yield per recruit for a small increase in fishing mortality results in only 10% increase in yield per recruit for the same increase in fishing mortality from a virgin fishery.

**$F_{max}$**  - a calculated instantaneous fishing mortality rate that is defined as "the rate of fishing mortality for a given method of fishing that maximizes the harvest in weight taken from a single year class of fish over its entire life span".

**FMP** - fishery management plan.

**FR** - *Federal Register*.

**GRT** - gross registered ton, a volume measure of the vessel's hull capacity.

**ICES gauge** - International Council for the Exploration of the Seas (ICES) longitudinal mesh gauge set a 4 kg pressure; as used in mesh selectivity studies.

**Internal waters** - marine waters landward of the territorial sea.

**$L_{50}$**  - length at which 50% of the fish are mature.

**M (natural mortality)** - instantaneous rate of death attributable to all causes except fishing.

**MSY** - maximum sustainable yield. The largest average catch of yield that can continuously be taken from a stock under existing environmental conditions, while maintaining the stock size.

**MRFSS** - Marine Recreational Fishery Statistics Surveys, 1979 - 1988.

**NEFC** - the Northeast Fisheries Center of the NMFS.

**NMFS** - the National Marine Fisheries Service of NOAA.

**NOAA** - the National Oceanic and Atmospheric Administration of the US Dept. of Commerce.

**OY** - Optimum Yield.

**Regional Administrator (RA)** - the Regional Administrator, Northeast Region, NMFS.

**Recruitment** - the addition of fish to the fishable population due to migration or to growth. Recruits are usually fish from one year class that have just grown large enough to be retained by the fishing gear.

**Scup pot or trap** - a scup pot or trap would be defined by the state regulations that applied to a vessel's principal port of landing. The definition and the minimum escape vent requirement would apply to pots fished in both state and federal waters.

**Secretary** - the Secretary of Commerce, or his designee.

**Spawning stock biomass per recruit (SSB/R)** - measures the average or expected contribution of any one young fish to the spawning stock biomass over its lifetime. A useful reference point is the level of SSB/R that would be obtained if there were no fishing. This is a maximum value for SSB/R which can be compared to levels of SSB/R calculated for different fishing levels.

**State waters** - internal waters and the Territorial Sea.

**Stock assessment** - the biological assessment of the status of the resources. This analysis provides the official estimates of stock size, spawning stock size, fishing mortalities, recruitment, and other parameters used in this Plan. The data from these assessments shall constitute the "best scientific information currently available" as required by the Act.

**Territorial Sea** - marine waters from the shoreline to 3 miles seaward.

**Take** - to catch and retain on board either in the hold lose or in boxes. It does not include fish from the most recent tow on deck and not yet sorted.

**TL** - total length.

**Total Allowable Level of Foreign Fishing (TALFF)** - that portion of the Optimum Yield made available for foreign fishing.

**USDC** - US Department of Commerce.

**Year-class** - the fish spawned or hatched in a given year.

**Yield per recruit** - the theoretical yield that would be obtained from a group of fish of one age if they were harvested according to a certain exploitation pattern over the life span of the fish. From this type of analysis, certain critical fishing mortality rates are estimated that are used as biological reference points for management, such as  $F_{max}$  and  $F_{0.1}$ .

**Z** - instantaneous rate of total mortality; the ratio of numbers of deaths per unit of time to population abundance during that time.

